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Thirty-first Annual Catalogue

6243

STERLING SEEDS

1915



TRADE MARK

THE MARK OF QUALITY

ALFALFA

NORTHROP, KING & CO'S
STERLING BRAND Alfalfa Seed
IS THE PUREST AND FINEST OBTAINABLE.
SEE PAGES 140-141-142-143 FOR FULL DESCRIPTION
AND PRICES OF ALL VARIETIES AND BRANDS.

NORTHROP, KING & Co., SEEDSMEN,

26-28-30 AND 32 HENNEPIN AVE., MINNEAPOLIS, MINNESOTA.

BEAUTIFUL GLADIOLI

Most Popular Cut Flower Of The Day, Now Within The Reach Of All.

Gladioli are highly ornamental whether growing among shrubs or in garden rows. If they are cut as the first bud expands they last a week or ten days in the house and every bud opens perfectly. What could be more decorative than a bunch of these great spikes with their two or three foot stems? No flower can match them in ease of culture or great diversity of color.

The Gladioli are the most attractive of summer-flowering bulbs. They bloom just when the garden needs lighting up. Their bright spikes help the perennial border especially, which so often lacks color at midsummer before its autumn revival. When used in the rose bed their season follows that of June roses.

Gladioli also make very striking hedge rows in the vegetable garden.

They are not delicate exotics needing protection from summer's hot winds and scorching sun, but strong and lusty growers. Yet with all their sturdiness, many Gladioli have flowers as delicate as orchids, as exquisite as the humming birds which dart among their brilliant blossoms.

We advise our customers to plant Gladioli in masses since they are always most effective when grown in groups of twenty-five or fifty bulbs of a kind or color, either in the perennial or shrubby border. At the special prices on quantities which are listed below one can well afford to plant them extensively.

Twelve Superb Named Varieties of Gladioli.

We especially urge all flower lovers to plant these twelve varieties, selected from our complete list. They will furnish a delightful surprise.

America

An Exquisite and Delicate Pink

This is a fine shade of shell pink. Its large flowers are produced in profusion on long perfect spikes. It is a strong, vigorous grower with luxuriant, dark green foliage. One of the most popular varieties for cut flower use. The spikes grow 2 to 3 feet high with a great number of wide-spreading blossoms all facing one way, showing a color exquisitely delicate. Each, 6c; doz., 50c; 100, \$3.50.

Augusta

Most Popular White

Flowers are a real paper-white, with blue anthers. The spike is set solid with flowers from top to bottom. A splendid sort and effective for planting between clumps of the brighter colored varieties. Each, 6c; doz., 50c; 100, \$3.50.

Baron Hulot or Blue King

Rich Deep Violet

The finest blue gladiolus yet introduced. This bears a good sized flower, well arranged on straight spikes; the color is a deep violet bordering on blue. This should always be planted with a light variety for contrast. Each, 8c; doz., 75c; 100, \$5.00.

Canary Bird

Very Handsome Distinct Yellow

This is a fine canary yellow. An unusual, but very attractive shade in gladioli. When used with white flowers it makes a remarkably effective combination. Each, 10c; doz., \$1.10; 100, \$7.50.

Contrast

One of the Most Striking

One of the most strikingly beautiful gladioli ever brought out. The flowers are of great substance and form a compact spike of perfect shape. The color is intense scarlet with large pure white center which is neither tinted nor mottled. Each, 40c; doz., \$4.00; 100, \$30.00.

Hollandia

Yellow Salmon—An Unusual Shade

A rare shade of yellowish salmon or rosy nankeen. This is one of the most splendid late varieties. Each, 4c; doz., 40c; 100, \$2.50.

Collection A

One of each of the 12 Superb Gladioli,
\$1.25, prepaid.

Collection B

Three of each of the 12 Superb Gladioli,
\$3.50, prepaid.

Collection C

Six of each of the 12 Superb Gladioli,
\$6.50, prepaid.

Collection D

Twelve of each of the 12 Superb Gladioli, 144 bulbs in all \$12.00, by express only, at purchaser's expense. If wanted by parcel post add at the rate of 10c per dozen extra.



Gladiolus America.

Six of a kind at dozen rate; 25 at 100 rate; 250 at 1000 rate.

Kunderdi Glory

Cream Pink, Ruffled Petals

This is tall, of especially robust growth, with large broad leaves. The flowers are good sized, of a delicate cream pink with a fine crimson stripe through each lower petal. All the petals are daintily ruffled. A good variety to plant with a red, for contrast. Each, 7c; doz., 70c; 100, \$5.00.

Lily Lehman

Pure White, Frilled Edge

A very fine, pure white flower with a frilled edge, slightly tinted rose. Especially good for contrast when planted near America or Panama. Each, 6c; doz., 60c; 100, \$4.00.

Nezinscott

Bright Blood-Scarlet, Bold and Striking

Bright blood-scarlet with deep, velvety crimson-black blotch, throat blotch pencilled with white. One of the best red varieties. Each, 10c; doz., \$1.00; 100, \$7.00.

Panama

Finest New Pink

This is a grand new seedling of America, which it resembles, but is of a much deeper pink. The spike is very long with flowers large and well arranged. Panama was awarded First-Class Certificate by the Newport Horticultural Society. Wherever exhibited it evokes great admiration. Each, 35c; doz., \$3.50; 100, \$25.00.

Princesps

Magnificent in Size and Beauty

The Amaryllis-flowered Gladiolus. Its wonderful size of flower, 5 to 6 inches across, perfect shape, brilliant coloring, and artistic form of spike are each such a notable feature that they combine to place it in the front rank. The petals are very wide and rounded, well reflexed, forming an almost circular flower. The color is brilliant scarlet-crimson, usually carrying three white blotches on the lower petals. Each, 6c; doz., 60c; 100, \$4.00.

Willy Wigman

or Blushing Bride

Delicate Rose, Tinted Cream

Delicate rose tinted cream, with soft carmine blotch. One of the finest of the delicate shaded varieties. Each, 5c; doz., 45c; 100, \$3.00.

Northrup, King & Co.'s

1915

Introductory Offer Gladioli

A special mixture with a complete range of color—shades of scarlet and red, pink and rose, white, striped and variegated! This assortment is sure to please and at the price, for strictly No. 1 selected bulbs, our customers can well afford to make extensive plantations. For successive bloom plant a few every ten days from April to July. Doz., 45c; 100, \$3.00; 1000, \$25.00; by express at purchaser's expense. If wanted by mail add 10c per doz. for postage. Six at doz. rate, 25 at 100 rate, 250 at 1000 rate.

For Our Complete List of Gladioli and Also Cultural Directions, See Pages 98 and 99.

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UTUMN CATALOGUE of Tulips, Hyacinths, Narcissus, Crocus, Etc., Winter Wheat and Other Seeds for Fall Sowing, Poultry Supplies, Etc. Issued August 1st.....

Sterling Seeds for 1915.

General Information and Suggestions to Customers.

Garden and Flower Seeds. Unless otherwise noted, all Garden and Flower Seeds are sent prepaid by us except pound lots or more of Peas, Beans and Sweet Corn. The last three items will be sent by parcel post if postage is added at parcel post rates named below.

Grass and Field Seeds. All Grass and Field Seeds, Onion Sets and Potatoes are shipped only at purchaser's expense by express or freight, as ordered. Prices quoted in this catalogue are F. O. B. Minneapolis. Small quantities of Grass or Field Seeds may be sent by parcel post but postage must be added at parcel post rates.

Seeds to Canada. On Peas, Beans and Corn in larger quantities than quarter pounds mailed to Canada, add at the rate of 12c per pound to cover postage.

Order Early. It is important to order early so as to avoid delay. We aim to fill orders with all possible dispatch but at the height of our busy season we cannot always ship orders the same day they are received. Early orders are given immediate attention. For perishable stock, especially, it is most desirable that we receive your order by March and in general it is best when possible, to send us your order as soon as you receive our catalogue. Please note the following seasons for shipping stock.

Hardy Nursery Stock. Trees, shrubs, vines and roses are shipped by express or freight during April. Orders should reach us in March.

Strawberry Plants. Our normal shipping season usually extends from April 25th to May 15th.

Hardy Perennial Plants. Included in this class are Pæonies, Iris, Phlox and the plants offered on the inside back cover page, etc. We recommend shipping them by express in April and May.

Gladioli, Dahlias, Summer Flowering Bulbs.

These are shipped by express or parcel post from April 1st to June 15th.

Bedding Plants. This includes Geraniums, Cannas, Vincas, Asters, etc. They are shipped by express from May 15th to June 10th. In the locality of Minneapolis, Cannas and Geraniums should not be set out before Memorial Day.

Vegetable Plants. These are shipped by express from April 15th to July 1st. Small lots can be mailed, if desired. See page 102 for dates when different varieties are ready.

Order Blanks. You will find it convenient to use the order blanks in the front of this catalogue. This will assist us in filling your orders promptly. The using of our blanks is not necessary, however, as any sheet of paper giving your name, address and shipping directions will answer the purpose.

In ordering vegetable and flower seeds, it is not necessary to write the names; only the quantities, catalogue number and prices of the varieties desired.

Errors. We exercise the utmost care in filling orders but in the rush of our busy season, errors will sometimes occur, in which case we shall appreciate being advised of the fact at once and proper correction will be made. Please keep copies of your orders for reference.

Seeds by Express or Freight. At prices quoted we deliver seeds to any Express or Railroad Depot in Minneapolis. On everything quoted by the 1/4 bu., bu., or 100 lbs., purchaser in every instance is to pay the transportation charges. However we will gladly quote delivered prices on any list of seeds upon request. This applies also to all tools, fertilizers, poultry supplies, etc., except when postpaid rates are named. Please give full shipping instructions. In the absence of these particulars we will use our best judgment. No extra charge for bags, boxes or cartage. Seeds now travel by express at 2nd class or the lowest rate.

Parcel Post Rates. All seeds, plants and general merchandise now come under the rates named below, providing the package weighs over four ounces. On four ounces or less the rate is one cent for each ounce regardless of distance; on parcels over four ounces the pound rates apply. Poultry supplies, fertilizers, garden tools, etc. have weight named so that postage may be readily estimated.

Important. When sending money to cover cost of postage allow for weight of box or packing material. For example, allow for two pounds' postage on one pound of Beans or other seed as the package when ready for mailing will weigh over one pound. If two pounds of Beans are ordered remit for three pounds' postage, etc.

Our Responsibility. We consider that we are under obligation to fill every order as promptly as possible. If we cannot fill your order for any item, we will at once return the money sent for same. We will not keep your money without adequate returns to you, send you due bill or substitute something you do not want.

Seeds of our Sterling Brand ordered from this catalogue will prove of satisfactory purity and germination to you or they may be returned at our expense and money paid for same will be cheerfully and promptly refunded without "ifs or ands."

As to our financial responsibility, we refer you to any bank or banker, or the commercial agencies in Minneapolis.

How to Send Money. Money can be sent safely either by P. O. order, bank draft, express draft, express order or registered letter. If your order amounts to \$1.00 or more it is best to send by one of the above methods. The rates charged for Postal Money Orders and Express Money Orders are now so low that these are the best ways to remit. Express Money Orders can be obtained at all offices of the principal Express Companies. Postage stamps taken in amounts less than one dollar. Never send coin in the mail unless in registered letter.

Prices. The prices named herein are those prevailing at the time this catalogue goes to press and are subject to market fluctuations in value. As values usually advance on many items during the season it will be to your advantage to order early.

Red Figure Price List. We enclose in this catalogue a special Red Figure Price List giving values on all Grass and Field Seeds. From time to time, as market changes make it advisable, new lists will be issued, a copy of which will be mailed to any address on request.

Correspondence. Please write inquiries on a separate sheet from your order. For further information in regard to correspondence see page 4.

Market Gardeners. We number among our customers many market gardeners and other users of large quantities of seeds. Those desiring to purchase greater amounts than those quoted in our catalogue will find it to their advantage to send us a complete, itemized list of their requirements and we will be pleased to name a special net price on the order, either F. O. B. Minneapolis or delivered to your station.

Dealers. For the convenience of our customers our line of seeds has been placed in about 15000 stores throughout the Northwest. Many of these merchants handle a liberal assortment in both package and bulk seeds. If the seeds desired are not in stock they will be glad to send to us for them. If no dealer in your vicinity handles our Sterling Brand seeds and will not get them for you, send your order to us and we will give it careful attention. To insure genuineness of our Sterling Brand seeds, our trade mark has been placed on every original bag and package.

Disclaimer. As seeds, plants and bulbs are subject to climatic and other conditions over which we have no control, after once being placed in the ground, therefore, Northrup, King & Co., give no warranty, express or implied, as to description, quality, productiveness or any other matter of any seeds, plants or bulbs they send out and they will not be in any way responsible for the crop, and every order for articles named in this catalogue will be executed on these conditions only. If the purchaser does not accept same on these terms they are at once to be returned.

Autumn Catalogue. Our Autumn Catalogue of Winter and Spring Flowering Bulbs, Hardy Perennials, Winter Wheat and other Seeds for fall sowing, Poultry Supplies, etc., is issued about August 1st of each year. This will be mailed to all those requesting it, free of charge.

Goods Lost in Transit. When we deliver goods to the transportation company, they become responsible for delivery of same in good condition at the receiver's station. If part of shipment is lost in transit or if bags are torn and part of contents destroyed, it is most important to have shortage noted by agent on the express or freight bill, including the net weight of seed which is received. Then the claim for shortage can be made by purchaser from the transportation company, or if desired, we will enter claim—providing we receive the original express or freight bill with shortage noted thereon. If an entire shipment is lost or delayed in transit, notify us within a reasonable period and we will start tracer.

Parcel Post Rates. See Order Sheet For Zone Number.

Local	Lbs.	1	2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-17	18-19	20-21	22-23	24-25	26-27	28-29	30-31	32-33	34-35	36-37	38-39	40-41	42-43	44-45	46-47	48-49	50														
Postage	5c	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30															
Zone 1 and 2 150 Miles	Lbs.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26														
	Postage	5c	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30														
Weight		1lb.		2 lbs.		3 lbs.		4 lbs.		5 lbs.		6 lbs.		7 lbs.		8 lbs.		9 lbs.		10 lbs.		11 lbs.		12 lbs.		13 lbs.		14 lbs.		15 lbs.		16 lbs.		17 lbs.		18 lbs.		19 lbs.		20 lbs.	
Zone 3 300 Miles		6c		8		10		12		14		16		18		20		22		24		26		28		30		32		34		36		38		40		42		44	
Zone 4 600 Miles		7c		11		15		19		23		27		31		35		39		43		47		51		55		59		63		67		71		75		79		83	
Zone 5 1000 Miles		8c		14		20		26		32		38		44		50		56		62		68		74		80		86		92		98		1.04		1.10		1.16		1.22	
Zone 6 1400 Miles		9c		17		25		33		41		49		57		65		73		81		89		97		1.05		1.13		1.21		1.29		1.37		1.45		1.53		1.61	
Zone 7 1800 Miles		11c		21		31		41		51		61		71		81		91		1.01		1.11		1.21		1.31		1.41		1.51		1.61		1.71		1.81		1.91		2.01	
Zone 8 Over 1800 Miles		12c		24		36		48		60		72		84		96		1.08		1.20		1.32		1.44		1.56		1.68		1.80		1.92		2.04		2.16		2.28		2.40	

For Index of this Catalogue See Page 160.

NORTHROP, KING & CO., SEEDSMEN,
MINNEAPOLIS, MINNESOTA.



At the left is our main building where we handle our vegetable and flower seeds. Here, also are located our general offices and city store. The middle building contains our modern seed-cleaning equipment. On the right is the warehouse where we stored at one time over 165 carloads of seed last season.

INTERESTING FACTS ABOUT PREPARING SEEDS FOR SALE.

This, our thirty-first annual catalogue, we consider surpasses in every particular our efforts in the past to furnish our customers the most complete and up-to-date seed book published. It has been enlarged by the addition of many new pages, new photographs, cultural notes and planting suggestions. We intend that every statement we make shall be truthful, without misrepresentation or exaggeration. On page 4 we give further information regarding the contents of this book and our supplementary library of booklets, treating on special subjects.

Our volume of trade continues to increase. We believe this has been made possible because our seeds are giving great satisfaction. Many new customers come to us each year because their friends recommended Sterling Seeds. There are many names on our records of those who have traded with us ever since we began business, over thirty years ago. They know they can rely upon us to serve them faithfully and supply them with reliable, hardy seed.

We have made careful tests in our trial grounds of many varieties of seed from widely different sections. Thus we have ascertained the localities where seeds can be grown most successfully to give greatest satisfaction under the trying conditions of our climate. As a result of these trials we draw on all parts of the world for our stocks.

1915 Seed Supply Ample.

Notwithstanding the threatened shortage of some varieties of seed which have been frequently mentioned in the public press and which is due to the disturbing conditions abroad, we expect to fill all orders in full this season. There may perhaps be a few exceptions, however, and to avoid disappointment we suggest that all orders be sent us early—as soon as this catalogue is received.

Prices Moderate.

We are also pleased to announce that the prices in this catalogue are not above normal. Every year a few items are scarce, owing to crop failures or other conditions, but with the exception of Beans, the seed crops have been up to the average this season. Our prices as usual are reasonable.

Why Sterling Seeds?

On this and the next page we mention a few facts as to why Sterling Seeds are well worth a place in your garden, on the lawn, on the farm and in your fields.



In this Department several million packets of Vegetable and Flower Seeds are put up annually.



Plants and flowers are necessary to improve the home grounds. This shows the effect obtained by using our Trees and Flowers.

Our Large Corn Crop.

Each year we grow under our personal supervision an increasingly large acreage of those varieties of seeds which can be best produced in the North. Our acreage of Field Corn for Seed is between 2,000 and 3,000 acres. This is all grown under the direction of our corn expert, who has forty years' experience behind him in growing, breeding and improving Seed Corn. A comparison of the varieties of Corn obtainable when we first engaged in business thirty-one years ago and now shows a remarkable change. We today offer varieties of Corn which will produce on the average from 50 to 60 bushels per acre and rival in quality and exceed in yield per acre, that grown in Illinois, Iowa, Missouri and other Southern States where the growing season is from two to four weeks longer. This result has been accomplished only by careful selection and years of patient labor. For further particulars as to Corn, read pages 118 to 131.

We Grow Beans in the North.

Garden Beans form another of our specialties. Our acreage is very large. These are grown in Northern Wisconsin and Northern Minnesota. Being Northern grown insures their hardiness, and productiveness. The selection of the seed and the methods of cultivation and care are of great importance in raising a crop of Beans. We continually inspect fields while growing and instruct growers as to proper methods of handling the crop. Unfortunately the crop of Beans in all localities was greatly reduced by unfavorable weather conditions this season, but our stock is up to our usual standard.

Thousands of Acres of Peas.

Our Pea crop is another important item. We grow several thousand acres from which we harvest a train-load of Peas. Great care is as necessary with this crop as with Beans. At the proper time they must be rogued to eliminate any tendency there may be to revert to the parent type, thus the seed is kept pure and true to name. The most economical and efficient methods for harvesting, threshing, cleaning and preparing Peas for market are followed, thus giving our customers the advantage of the lowest possible cost of production.

MODERN METHODS OF SEED PRODUCTION.

Specialists Grow Every Crop.

We might go on and enumerate in detail the various seed crops which we supervise and prepare for our trade. This, however, is impossible in the limited space at our disposal. We merely mention other crops which we grow in large quantities: Turnip Seed, Sweet Peas and other Flower Seeds, Onion Seed, Lettuce Seed, Seed Grain of many kinds, Sweet Corn, Potatoes, Onion Sets, Millets and Grass Seed, including Clovers. Seeds which we do not grow are arranged for in advance with specialists who devote their attention to the raising of a single, or, at most, a few individual varieties. They have spent their lives perfecting and improving the particular crops which they grow. We thus are able to secure the highest quality and the best seed by co-operating with the most reliable and trustworthy growers. Our intimate acquaintance with these men for nearly a third of a century and the knowledge we have obtained of their methods and the results which may be expected from seed grown in this latitude are of inestimable value to those who plant seeds. All this is placed at your service without any extra expenditure than that necessary to pay for the seeds which you purchase. When you buy Sterling Seeds you get full value plus the benefit of our knowledge and experience covering thirty-one years in the Northwest.



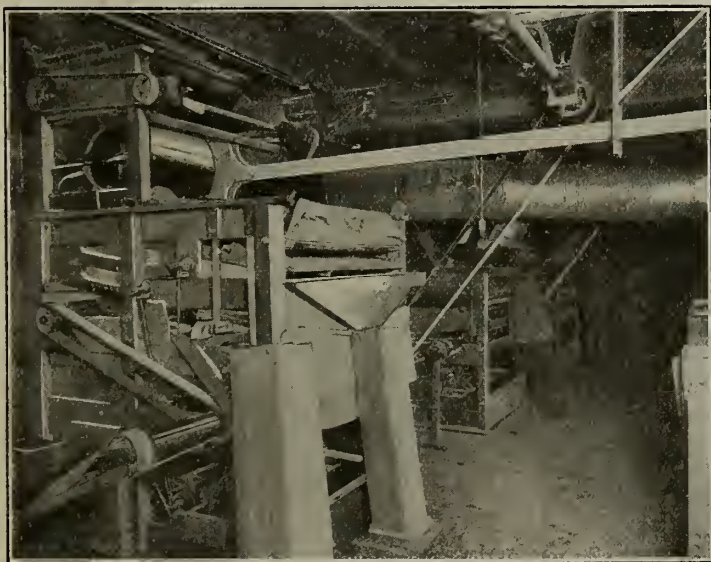
Partial view of one of our Timothy rooms. We handle hundreds of carloads of Grass and Field Seeds annually.

Sterling Seeds are Tested.

Every lot of seed is carefully analyzed as to purity and tested as to germination. Our trained analyst with his assistants makes these tests which are incorporated in our records for the protection and information of those who buy seeds from us. Under no conditions are seeds allowed to leave our warehouses which are not suitable in all respects for sowing. We see to it that the germination is up to standard and that the purity complies, not only with our requirements, but with the Pure Seed Laws of all states. To every bag of agricultural seed, we attach a tag on which is indicated both purity and germination and other information which would be of interest and value to those who receive the seed. Illustrations of our testing department will be found on page five.

In addition to the care exercised in growing, cleaning and testing seeds, we prove our stocks for trueness to type, productiveness, earliness, adaptability and hardness, thus enabling our customers to buy seeds from us in which they can place their utmost confidence.

We consider it our duty to sell only such seeds and other goods as will justify the purchaser in continuing to favor us with his business.



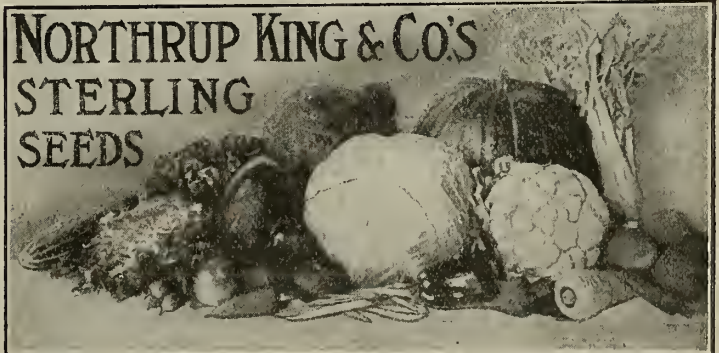
A glimpse at some of our Mills, with which we clean Grass and Field Seeds. With our up-to-date system it is possible to unload a car of Grain, weigh it carefully, clean it thoroughly and reload in a very short time.



A carload of Sterling White Dent Corn grown from our selected, tested seed. When we started business, in 1884, no one imagined that such corn could ever be raised in Minnesota.

Complete and Up-to-Date Equipment.

A trip through our warehouses would be of great interest to all who sow seeds. Permit us at this time to extend to you a special invitation to visit us and go over our plant. Owing to the immense volume of our trade several large warehouses located at different points in or near the City of Minneapolis are necessary. Each building has its special purposes. In our main building on Hennepin Ave. are stored our vegetable and flower seed stocks. In this building may be found our offices and printing department and here most of the orders are filled. Our grain and grass seed cleaning plant is located a few blocks north on First Street in a large six-story building. Here is installed the most modern and up-to-date seed cleaning machinery. Some of the men in charge of this department have been in our employ for twenty-five years. They are capable of producing most satisfactory results in cleaning and purifying the seeds we sell. Every lot of seed is carefully inspected after being cleaned and if it does not come up to our required stand-

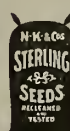


Products of the Home Garden. An effectual way to reduce the high cost of living is to raise your own vegetables from Sterling Seeds.

and it is recleaned over the same or other machinery until it is suitable for seed purposes. There are special machines for Clover Seed, others for Alfalfa and still others for light grass seeds, as well as special mills for cleaning Seed Grains, Field Corn and Millets. In other warehouses we have facilities for the handling of Onion Sets, Seed Potatoes, Shrubbery, Bulbs, Roots, etc. Many of our buildings are located on railroad tracks enabling us to unload or load cars quickly. We frequently ship whole carloads of seeds to our customers. A short time ago we had an order from South America which amounted to nearly \$7,000 and filled two large freight cars.

In addition to a splendid equipment and force of competent men, we have the name, "Sterling," of which to be proud. It is now realized that the true value of seeds is determined by the careful application of knowledge and experience by the seedsmen. Sterling Seeds are the supreme result of modern methods of seed production.

What Our Trade Mark Means.



Our Sterling Bag Trade Mark is used to brand only those varieties of seeds which we can especially recommend to our customers. A variety so marked will be found the best of its kind in every instance. We use this method to designate our specialties.

Northrup, King & Co.'s Sterling Brand Seeds have proved by careful test superior in purity, germination, productiveness and hardness. They comply in every respect with the pure seed laws of all states.



Our Library of Sixteen Booklets for the Successful Farmer and Gardener.

DO YOU WANT BOOKLETS ON LIVE TOPICS?

"Alfalfa." Seeding, cultivating, harvesting and feeding this valuable crop.
 "Cabbage Growing." seeding, transplanting, cultivation, harvesting, etc.
 "Clover." Handles this subject in concise, though complete manner.
 "Field Corn." Deals particularly with Corn growing in the North.
 "Hand Book for the Garden." Culture for vegetables, flowers, shrubs, etc.
 "Hen Wealth." Feeding and care of poultry from baby chick to laying hen.
 "Insects and Diseases." Deals with the control of insects and diseases.
 "Lawns." How to build a new lawn, repair old lawns and keep a lawn green.

Our sixteen booklets on the above subjects may tell you many things you already know; they are also quite sure, we think, to tell you some things that you do not know. If they give you just **ONE IDEA** that will save you labor or increase your profits, it is well worth your while to read them.

Our Offer. The regular price of these booklets is ten cents each. We will, however, send *if requested*, a booklet free with orders for each of the articles on which the booklets treat. With an order for Field Corn, we will send a booklet on "Field Corn for the Northwest;" with an order for Poultry Feed or Supplies, we will send a booklet on "Hen Wealth;" with an order for Onion Seed, we will send a booklet

"More Pork Profits." The care and feeding of swine, including pasture crops.
 "Onion Culture." Treats on every phase of this subject.
 "Pastures and Soiling Crops." Facts on all kinds of pastures and soiling crops.
 "Potato Culture." Of value to all potato raisers, for market or home use.
 "Quack Grass and Other Weeds." Explains control or elimination.
 "Root Crops." Carrots, rutabagas, mangels, sugar beets, etc. for stock feed.
 "Silage and Silos." A treatise on growing, handling and feeding silage.
 "Vine Crops." Culture of tomatoes, cucumbers, melons, strawberries, etc.

on "Onion Culture" and so on through the list. To those who wish to obtain the booklets immediately, we make the following special offer to get them into the hands of users of seeds early in the season. We will send any one booklet, postpaid, for 5 cents; any seven booklets for 25 cents, or the entire set of sixteen will be mailed, postpaid, for only 50c. To make this offer stronger, if on the receipt of the booklets you are not entirely satisfied with the investment, keep the booklets and we will promptly and without question refund the money paid for same. These booklets, while not pretentious, contain information that you will find valuable; that is why we want you to read them.

INFORMATION AND SERVICE BUREAU.

For many years past, we have been in the habit of replying, more or less fully, to a great many thousands of inquiries which have come to us by mail, on subjects pertaining to farming, gardening, mixtures of grasses for various purposes, varieties best adapted for local conditions and many other items on agriculture, horticulture and floriculture. Many of these queries require much more information than can conveniently be given in a letter, but in such cases we either send a booklet which will furnish the desired material or will refer the customers to a book or books where it may be obtained.

Our large organization is composed of over two hundred persons. Many have long been connected with this business and have gained a fund of valuable knowledge and information. Others have come from houses

long established in the seed business in the older countries of Europe. Each is especially fitted and trained in his own particular line. Having this corps of experienced men we are in a position to disseminate accurate and timely suggestions without cost to our customers and in no way incurring obligation.

We therefore urge those desiring assistance or advice to correspond with us and we will gladly give all the information in our power, within the reasonable bounds of a letter. Please write inquiries on a sheet of paper separate from your order, so that it may not interfere with prompt shipment of your order. We also have issued a series of booklets on timely subjects which are listed above. These will be sent free with orders as stated, or may be secured very reasonably. Money refunded if not satisfactory.

Features of Especial Interest to be found in this Catalogue.

Not content with making this catalogue a mere price list, we have tried to include as many cultural notes and helpful suggestions as possible, so it will be a complete book of reference for farmers and gardeners.

Every farmer will enjoy what is said about "Alfalfa," "The Plain Truth about Grades," "Corn Insurance," "Sterling Silo Corn," "What is a Bushel of Seed Corn Worth?" "Marquis Wheat," etc.

The Market Gardeners will be interested in "Golden Bantam Corn," "Northern Grown" "Onion Sets," "Peas" and "Beans" as well as "Minnesota Red, Yellow and White Globe Onions."

Flower lovers will find the many cultural directions helpful, particularly those for Sweet Peas, Perennial Seeds, Gladioli and Phlox.

Those who wish to improve their home grounds will find practical suggestions among the tree, shrub and hardy plant pages. We call particular attention to the excellent collections offered on the cover pages. Many varieties of Gladioli are now being offered at prices within the reach of all. The initial investment for summer flowering bulbs is small indeed, compared with the results which cover a period of years. The bulbs reproduce themselves from year to year and are easily stored.

Hints on the care of berries will interest the fruit grower. Poultrymen may obtain valuable information regarding the raising of chicks, the feeding and care of hens from the poultry pages.

For these reasons we hope our customers will not discard this catalogue after making out their orders, but will preserve it for reference during the growing season or for the guidance and information of their friends.

Arrangement of Departments in this Catalogue.

Vegetable Seeds. Arranged in alphabetical order. Pages 6 to 53.
 Flower Seeds. Annuals, Pages 54 to 76; Perennials, Pages 77 to 81.
 Hardy Plants including Paeonies, Iris and Phlox. Pages 82 to 87.
 Roses, Fruits, Trees and Shrubs. Pages 89 to 97.
 Bulbs, Dahlias, Vegetable and Flowering Plants. Pages 98 to 107.
 Grass and Field Seeds, Grains and Forage Crops. Pages 108 to 148.
 Insecticides, Poultry Supplies and Sundries. Pages 149 to 159.

What Our Trade Mark Means.

Our Sterling Bag Trade Mark is used to brand only those varieties of seeds which we can especially recommend to our customers. A variety so marked will be found the best of its kind in every instance. We use this method to designate our specialties. Northrup, King & Co.'s Sterling Brand Seeds have proved by careful test superior in purity, germination, productiveness and hardness. They comply in every respect with the pure seed laws of all states.





TESTING SEEDS INDOORS FOR PURITY AND GERMINATION.

Long before Pure Seed Laws were passed in the northwestern states, we had established a standard to which our Sterling Brand Seeds must conform. In 1897 we came to the conclusion that intelligent seed buyers would willingly pay the additional price which it is necessary to charge for strictly high grade seed. Our seed laboratory was then organized and we have enjoyed ever since the reputation for furnishing in our Sterling Brand the highest quality of seeds possible to obtain.

The illustration above shows a portion of our seed testing department. This is in charge of a graduate seed analyst who is fully competent to test all seeds both for purity and germination. With the aid of powerful magnifying glasses and delicate scales he is enabled to ascertain accurately, the purity of every lot of seed we handle. Each sample is carefully numbered and corresponds with the original lot in our warehouse. After the test is made, record is entered in our books and we are enabled at any time to trace the origin and ascertain the purity and germination of the seed filled on every order passing through our hands.

The germinators which we use, shown in the illustration below, are duplicates of those in the United States Department of Agriculture at Washington, D. C. and in many State Experiment Stations, and give us accurate tests. Several methods are followed. Some are placed in blotters, others in damp cloths, while still other samples, such as Blue Grass, must be germinated in bell jars, as indicated in the illustration at the right.

Our seed laboratory is an example of the painstaking care which is exercised throughout our business. Every order, large or small, is given careful attention in every detail. Every shipment of grass and field seeds which leaves our hands will be tagged showing purity and germination. Tags are attached to every bag whether the law requires it or not, so that you may know the record of the seed before it is placed in the ground.

Your confidence in Sterling Seeds will not be misplaced. It is worth much to know that the seeds you sow are capable of producing satisfactory results.





Sectional View of a Garden in Alaska, Grown from Northrup, King & Co.'s Sterling Seeds.

ARTICHOKE

5. Green Globe. The seed may be sown indoors and plants potted same as the tomato and set out in the garden on approach of warm weather; or the seed can be sown in hills outside, and thinned out to one plant in a hill. Plants should be set in rows three feet apart and two to three feet apart in the row. Grown for the unripe flower heads, which are highly esteemed by epicures. Large pkt., 10c; oz., 40c; $\frac{1}{4}$ lb., \$1.25.

Artichoke Roots. Most valuable food for hogs that can be grown. Every hog raiser should plant them. After one acre is planted their value will be so appreciated that larger areas will be devoted to them. They are not only very healthful, but as a fattening agent are unexcelled. They yield very heavily, 300 to 350 bushels to the acre being realized on good soil. It is not necessary to dig them for if given an opportunity the hogs will help themselves.

Not only are they valuable for hogs, but are an excellent food for cattle, sheep and horses. Fed to milch cows, they are for the production of milk almost equal to bran because of their succulency.

Artichokes need planting but once and little or no culture after the first year. Cut as potatoes, only smaller; plant in rows three and one-half feet apart. Plow deep, plant shallow, say two inches. The second year, break up the ground as for corn; they will come up thickly all over the surface. Run through each way with a cultivator when a few inches high.

Those wishing to purchase should place orders very early, to be shipped as soon as favorable weather arrives. By freight or express at purchaser's expense. 1 lb., 15c; 2 lbs., 25c; 5 lbs., 50c; 10 lbs., 75c; 25 lbs., \$1.35; 50 lbs., \$2.50; 150 lbs., sufficient for one acre, \$7.00.

If wanted by parcel post add 10c per lb. to cover extra cost.

ASPARAGUS SEED

Culture. To start the asparagus bed from seed, sow 1 oz. to 50 feet of row in early spring, and transplant to permanent bed the next year as outlined below.

10. Bonvallet's Giant. The quickest yielding, (a year ahead of seed of other sorts) heaviest producing, finest quality and most disease-resisting of any variety; in color, white with purple tip. Market gardeners are discarding other well known sorts in favor of this variety. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.35.

15. Columbian Mammoth White. Gives immense yield of clear white roots. A most distinct and valuable variety. The shoots remain white, without earthing or artificial blanching, as long as fit for use. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 60c.

20. Conover's Colossal. A standard sort, color deep green, quality first-class, spreads less than other sorts. Yields from 15 to 30 sprouts from a single plant. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 50c.

25. Palmetto. Mammoth in size, light green, regular in growth and appearance. Usually ready for market before other varieties. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 60c.

ASPARAGUS ROOTS

Culture. The easiest way to obtain an Asparagus bed, is to set out roots. It takes 3 years to secure one from seed, but with our large, strong roots a bearing bed is obtainable in 2 years.

Asparagus Roots thrive best in soil exceptionally rich and mellow and supplied with a liberal amount of humus. A simple way to start the asparagus bed is to plow furrows 7 inches deep and 3 to 4 feet apart, according to the richness of the soil, then set the plants, which should be at least one year old, (two-year-old are better) in the trench, allowing 12 to 18 inches between them; spread the roots out well and cover with two inches of soil. After cultivation, gradually fill up the trench, eventually burying the crowns of the plants to a depth of 6 inches.

Cultivate shallow and frequently the first season and as soon as the stalks are dead in the fall, remove them and cultivate the entire surface of the bed to a depth of 4 inches, then very early in the spring to a depth of 3 inches and again the latter part of June, working into the soil at this time a liberal supply of decomposed stable manure.

By express or freight at purchaser's expense.

By Mail.

	100	1000	100, postpaid.
Barr's Mammoth. Large, green stalks.	\$1.00	\$7.50	\$1.50
Bonvallet's Giant. White, fine quality.	1.00	8.00	1.50
Columbian Mammoth White.	1.00	7.50	1.50
Conover's Colossal. Standard green.	.75	6.00	1.25
French Giant Argentueil. Superb flavor.	1.00	7.50	1.35
Palmetto. Mammoth light green.	.75	6.00	1.25

It is best to send Asparagus Roots by express by which method they will arrive in first class condition. We offer large, strong roots, which produce satisfactory results.

Roots are put up in bunches of 25 each. 25 at 100 rate, 250 at 1000 rate.



Asparagus.

BEANS

At the following prices on beans—packets and quarter pounds are sent prepaid, all larger quantities are shipped at purchaser's expense; if wanted by parcel post, add postage at rate on page one.

Culture. Beans are extremely sensitive to cold and wet so it is useless to plant them before the ground becomes dry and warm.

Bush beans may be planted about 2 inches deep in drills from 24 to 30 inches apart according to the variety and richness of the soil, placing the seed 3 inches apart or 4 seeds in hills 24 inches apart each way.

Cultivation should be frequent until the plants begin to bloom, but only when the foliage is dry, for if disturbed when wet the vines will rust.

DWARF WAX VARIETIES

30. Currie's Rust Proof Black Wax. A very early, beautiful wax bean, bearing an abundance of crisp, tender, stringless pods, free from rust. It is of excellent quality, delicious flavor. Seed kidney-shaped. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 25c; 5 lbs., \$1.00; 10 lbs., \$1.85; 25 lbs., \$4.25.

35. Davis Kidney Wax. The most hardy and productive wax bean. The pods are long, white, straight, crisp and tender. The vine is rustless and very vigorous, bearing the pods in clusters. Seed kidney-shaped and white. For canning this is unexcelled on account of the purity of the pod and bean. Pkt., 5c; $\frac{1}{4}$ lb., 15c; lb., 30c; 5 lbs., \$1.25; 10 lbs., \$2.25; 25 lbs., \$5.00.

40. Improved German Black Wax. Vines medium sized, vigorous and hardy. Pods medium length, curved, cylindrical, fleshy, of a clear yellowish white. Remain for some time in condition for use. Seed small, black. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 25c; 5 lbs., \$1.00; 10 lbs., \$1.75; 25 lbs., \$4.25.

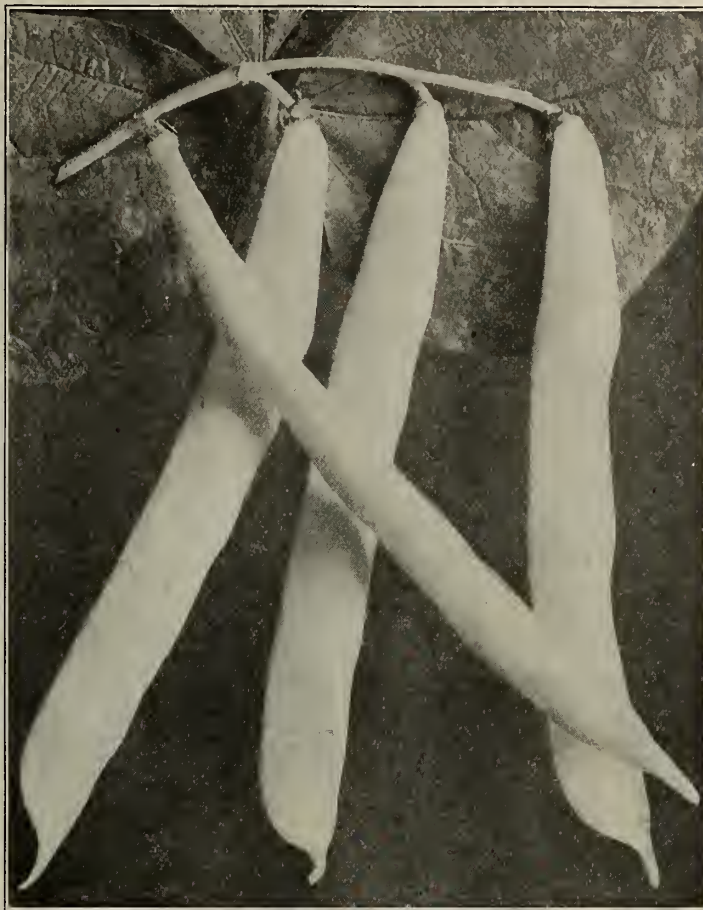
45. Improved Golden Wax. The plants are hardy and bear an abundance of straight, broad, flat pods. Resist rust to a marked degree. Seed white, with brown or black markings near the eye. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 25c; 5 lbs., \$1.00; 10 lbs., \$1.85; 25 lbs., \$4.25.

50. Perfection Wax. Very productive; the large flattened pods lying in clusters. Pods are six inches long, a half inch broad, sharply pointed, tender and brittle, with little string. Color, rich golden yellow. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 25c; 5 lbs., \$1.00; 10 lbs., \$1.85; 25 lbs., \$4.25.

55. Wardwell's Kidney Wax. The strong vines yield abundantly, long, nearly straight, broad, creamy-white pods. They are of fine quality and a fine variety for the market gardener. Matures a little later than the Golden Wax. Seed large, kidney-shaped, white with dark markings about the eye. Pkt., 5c; $\frac{1}{4}$ lb., 15c; lb., 30c; 5 lbs., \$1.25; 10 lbs., \$2.25; 25 lbs., \$5.00.

Dwarf Wax Bean Collection.

One packet each of the above six varieties, 25c, postpaid; $\frac{1}{4}$ lb. of each of these six varieties, 60c, postpaid.



Currie's Rust Proof Black Wax Beans.

DWARF OR SNAP, GREEN POD VARIETIES

60. Bountiful. The plant is very handsome and of sturdy growth, being practically immune to rust and mildew. It is very hardy, early and prolific and continues in bearing for several weeks. The pods are of immense size, rich green, thick, broad, extra long, solid, meaty, rich, tender and entirely free from string. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 25c; 5 lbs., \$1.00; 10 lbs., \$1.85; 25 lbs., \$3.75.

65. Black Valentine. Pods are long, round and straight, very attractive in appearance and of good quality. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 25c; 5 lbs., \$1.00; 10 lbs., \$1.85; 25 lbs., \$3.75.

68. Dwarf Horticultural, or Bush Cranberry. Very productive and compact in growth. Pods medium length, broad, thick, curved and splashed with red. Very desirable as a green shelled bean, maturing early. Seed, large, oval, plump and splashed with bright red. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 25c; 5 lbs., \$1.00; 10 lbs., \$1.75; 25 lbs., \$3.50.

70. Extra Early Red Valentine. (Round Pod.) Pods are usually ready to pick in about forty-three days from germination. Vine erect; pods, medium length, curved, cylindrical, with crease in back, very fleshy, crisp and tender; seed long, of medium size. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 25c; 5 lbs., \$1.00; 10 lbs., \$1.75; 25 lbs., \$3.50.

72. Longfellow. A remarkably early variety, producing long, round, green pods, solid, fleshy, and exceedingly tender. The pods are very brittle and have no strings when broken, unless the pods are quite old. These beans are extra early, the pods are ready to pick four days in advance of most other green podded bush beans. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 25c; 5 lbs., \$1.00; 10 lbs., \$1.85; 25 lbs., \$3.75.

75. Long Yellow Six Weeks. Early, productive and of excellent quality; pods often eight inches long; a popular variety. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 25c; 5 lbs., \$1.00; 10 lbs., \$1.75; 25 lbs., \$3.50.

80. Refugee. Late or 1000 to 1. Vine large, spreading, exceedingly hardy, very late, and for this reason used for late planting and for pickles. The pods are long, cylindrical, green and of good quality. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 25c; 5 lbs., \$1.00; 10 lbs., \$1.75; 25 lbs., \$3.50.

85. Stringless Green Pod. The finest green pod, stringless bean. The earliest and hardiest of all green-podded sorts and produces large, handsome pods, some of which measure fully six inches in length. The plants are very productive, bearing profusely the beautiful green pods, which are perfectly round, straight, broad, tender, brittle, finest flavor, very fleshy and entirely stringless. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 25c; 5 lbs., \$1.00; 10 lbs., \$1.75; 25 lbs., \$3.50.

Dwarf or Snap, Green Pod Collection.

One packet of each of the above eight varieties of Dwarf Green Pod Beans, 35c, postpaid; $\frac{1}{4}$ lb. of each of these eight varieties, 75c, postpaid.

Please note that quantities of beans larger than quarter pounds are not prepaid. Refer to top of this page and postage rates on page one.



Improved Golden Wax Beans.

BEANS

Culture. Plant all varieties of beans after danger of frost is past. Pole beans require fertile soil. Plant six seeds 2 inches deep in hills around poles 8 feet high, set firmly in the ground.

The poles should be set about 3 feet apart each way and the seeds placed in the ground in a circle about 6 inches from the base of the pole. Cultivation same as for bush beans.

POLE OR RUNNING VARIETIES.

90. Big Profit Pole Bean.

Two weeks earlier than any Pole Lima.

Strictly speaking, this is not a lima bean, but, it bears so close resemblance to the lima that with one important exception, it almost might be called such. The exception is, that the Big Profit Bean is fully two weeks earlier than any Pole Lima. The full significance of this fact can only be fully understood by those who grow pole beans for the market, as shelled beans are eagerly looked for by purchasers and the first to appear on the market always sell at high prices, usually from 40 to 60 cents a quart.

The beans are large, thick and luscious, and are borne four or five in a pod. The vines are strong and thrifty, cling tightly to poles and bear abundantly, the pods hanging in bunches or clusters. No lima bean can surpass the Big Profit in quality; it has the same rich, buttery flavor, always desired but seldom found. Gardeners will make no mistake in testing this new, extra early bean. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 25c; 5 lbs., \$1.00; 10 lbs., \$1.85; 25 lbs., \$4.25; 50 lbs., \$8.00.

95. Golden Cluster Wax. The vines are large, vigorous, and hardy; pods six to eight inches long, borne in clusters; color, yellow to white; broad, thick, fleshy and of the very best quality. Seed, oval, dull white in color. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 25c; 5 lbs., \$1.00; 10 lbs., \$1.85; 25 lbs., \$4.25; 50 lbs., \$8.00.

98. Horticultural Pole, or Speckled Cranberry. Vines vigorous with large, light colored leaves. Pods short, broad, green, streaked with bright red. Beans are large, round, splashed and spotted with red. Of very fine quality, either as a green shelled bean or dry. The best late shell bean for both home and market. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 25c; 5 lbs., \$1.00; 10 lbs., \$1.85; 25 lbs., \$3.75; 50 lbs., \$7.00.

100. Kentucky Wonder.

(Old Homestead.) This climbing variety is very vigorous and productive and bears its pods in large clusters. The pods are green, very long, often being nine or ten inches, nearly round, very crisp, and so fleshy, that they are greater in width than breadth. The seed is long, oval, dun-colored. Very early, and the best to use in the green state. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 25c; 5 lbs., \$1.00; 10 lbs., \$1.85; 25 lbs., \$4.25; 50 lbs., \$8.00.

105. King of the Garden Lima.

The vines are very vigorous and prolific. Pods are of large size, filled with four or five large beans of very fine quality. The beans are easily shelled and of handsome appearance. A favorite with market gardeners. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 25c; 5 lbs., \$1.00; 10 lbs., \$1.85; 25 lbs., \$4.25; 50 lbs., \$8.00.

107. Large Green Seeded Pole Lima. This new variety is sometimes called the "most perfect pole lima" on account of several very distinctive features. The vines are strong and vigorous, and produce a great number of pods. The pods are usually filled with four large broad beans, having a more nearly perfect shape, than any other Pole Lima. Especially valued for canning purposes. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 25c; 5 lbs., \$1.00; 10 lbs., \$1.85; 25 lbs., \$4.25; 50 lbs., \$8.00.

110. Large White Lima. Vine tall, growing vigorous but slender; leaves medium sized, smooth, light green; pods borne in clusters; are long, broad, very thin, dark green; seed large, flat, greenish-white. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 25c; 5 lbs., \$1.00; 10 lbs., \$1.85; 25 lbs., \$4.25; 50 lbs., \$8.00.

115. Lazy Wife. So named on account of the large number of pods it affords, making it easy to obtain a supply. One of the best varieties for snaps of the late green-podded pole beans. The pods grow in large clusters, are five to seven inches long, broad, thick, fleshy, and entirely stringless. They have a rich, buttery flavor. The dry beans, which are white, are fine for winter use. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 25c; 5 lbs., \$1.00; 10 lbs., \$1.85; 25 lbs., \$4.25; 50 lbs., \$8.00.

120. Scarlet Runner. Ornamental and useful. The vine is graceful; flowers are of a brilliant scarlet, and the beans are of an excellent quality, either when shelled or in a dry state. Large pkt., 10c; $\frac{1}{4}$ lb., 15c; lb., 40c.

122. White Dutch Runner. Identical with Scarlet Runner Bean except in color of blossom, which is white. Very rapid in growth. Large pkt., 10c; $\frac{1}{4}$ lb., 15c; lb., 40c.

125. White Creaseback. A fine, early, green-podded, pole bean of rapid growth and very productive. The pods grow in clusters and are from five to six inches in length, perfectly round and deeply creased. They are very fleshy, stringless and of the best quality. The beans are white and are excellent shelled. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 25c; 5 lbs., \$1.00; 10 lbs., \$1.85; 25 lbs., \$4.25; 50 lbs., \$8.00.

DWARF OR BUSH LIMA VARIETIES.

Those who have not grown the Dwarf Lima Beans should try them. No garden is complete, no table properly supplied without them. Lima Beans weigh 56 lbs. per bushel.

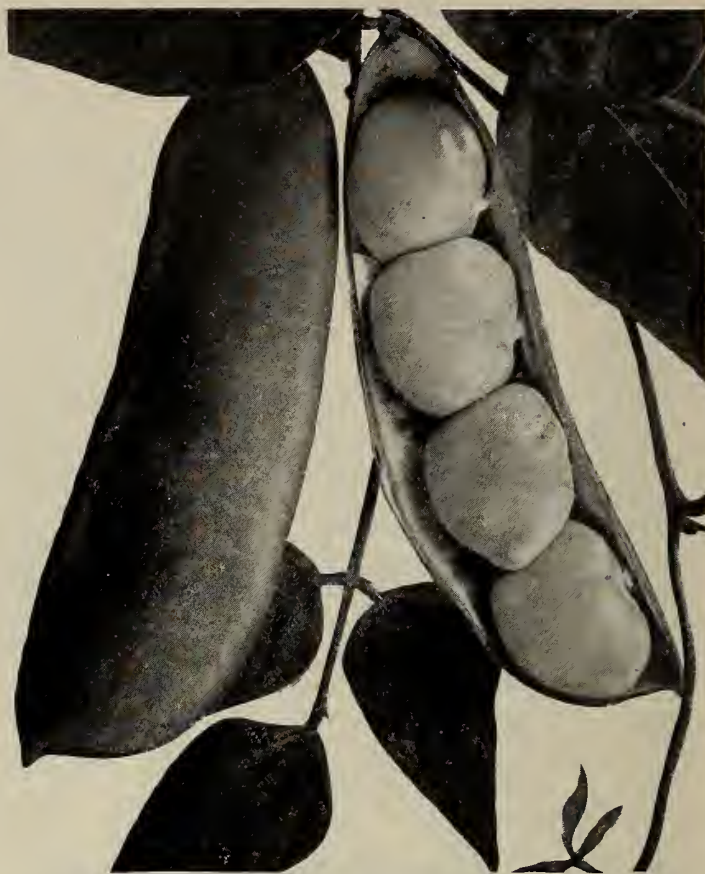
130. Burpee's. The bushes are 18 to 20 inches high, of stout, erect growth, branch freely, forming large circular plants from two to three feet in diameter, very prolific, bearing large, beautiful pods well filled with large beans of the same size and delicious flavor as the pole variety. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 25c; 5 lbs., \$1.00; 10 lbs., \$1.85; 25 lbs., \$4.25; 50 lbs., \$8.00.

135. Dreer's. The pods are short but thick, containing three to four very thick, short beans, closely packed. This variety is later than Burpee's but the plants are very productive and the beans are easily shelled and of delicious flavor. The vines are not erect, but trail over the ground about three feet. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 25c; 5 lbs., \$1.00; 10 lbs., \$1.85; 25 lbs., \$4.25; 50 lbs., \$8.00.

140. Henderson's or Sieva. Grows erect to a height of 18 to 20 inches and requires no support. Very early and productive. The beans have the true lima flavor, rich, buttery and tender. These beans are at least two weeks earlier than most pole limas. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 25c; 5 lbs., \$1.00; 10 lbs., \$1.85; 25 lbs., \$4.25; 50 lbs., \$8.00.

145. New Wonder Bush Lima. Of more bushy character than other varieties, the pods being borne nearer the stalk. It is very productive and in quality and flavor is unsurpassed. Try this bean. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 25c; 5 lbs., \$1.00; 10 lbs., \$1.85; 25 lbs., \$4.25; 50 lbs., \$8.00.

Prices on beans are prepaid only on packets and quarter pound lots. Postage rates on page one.



Burpee's Bush Lima Beans.



Kentucky Wonder Pole Beans.

FIELD BEANS

Pure Seed. It is to us a source of constant wonder that bean growers, otherwise intelligent, should plant mixed seed. A visitor to the commission houses of any large city can see thousands of bushels of beans, clean, bright and of good sample, but badly mixed as to variety. This always results in a loss to the grower, as any variety of beans in order to bring the highest market price must be straight stock. Let us say, for example, that straight Navy Beans are worth \$3.00 a bushel; Medium Beans, \$2.75; Marrows, \$2.50. If mixed with each other they will sell at a discount of from 75c to \$1.00 a bushel from these prices. Let us do a little figuring and see what farmers will gain by planting pure seed, taking 30 bushels an acre as a crop.

Additional price of 75c a bu., 30 bu., \$22.50; less extra cost, $\frac{1}{2}$ bu. of seed, \$1.50; net gain, \$21.00.

Can farmers afford to lose \$15.00 to \$20.00 an acre when they can gain from one to two thousand per cent on the investment by planting pure seed?



150. California Wonder or Improved Tree Bean.

A Wonderful, Productive, White Field Bean.

This is without question the heaviest yielding bean known. It is not a garden variety, but belongs to the class of field beans, the seed of which resembles the well known "Navy" bean. On account of its snowy whiteness and its uniformly small size, the California Wonder commands the highest price in all markets. Our seed is carefully selected and is pure stock, which is seldom found in Navy Beans. Mixed stock always sells at from 25 to 50 per cent less than straight stock. A few cents extra expended on the seed means many dollars in the crop. The plants grow upright and bear the pods well up from the ground, thus keeping them away from the soil and making them more easily gathered. This variety is giving the best of satisfaction to our customers as is evidenced by the many letters of commendation which we have received. Thirty pounds of California Wonder Beans will plant an acre. Price, pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 15c; 5 lbs., 60c; 10 lbs., \$1.00; 25 lbs., \$1.85; 50 lbs., \$3.35; 100 lbs., \$6.50.

Book on Bean Culture. By Glenn C. Sevey. The only complete authoritative and comprehensive book on the subject. Price, 50c, (postpaid, 55c).

SEVEN POINTS OF MERIT of the CALIFORNIA WONDER BEAN.

Productiveness, Whiteness, Small Size, Uniformity, Salability, Upright Growth, Fine Quality.

The California Wonder Bean has other valuable characteristics which commend it to every grower of beans.

155. Brown or Swedish. There is a large call for these beans and although we have given them small space, have sold large quantities. It is a fine field variety and the demand is usually good and the price high. The beans are brown in color, medium size and excellent for cooking. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 15c; 5 lbs., 60c; 10 lbs., \$1.00; 25 lbs., \$1.75; 50 lbs., \$3.25; 100 lbs., \$6.00.

160. Choice Navy. Our stock of this well known variety has been carefully selected and cleaned and will be found far superior to beans commonly offered as "Navy Stock." Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 15c; 5 lbs., 60c; 10 lbs., \$1.00; 25 lbs., \$1.75; 50 lbs., \$3.25; 100 lbs., \$6.00.

165. Red Kidney. A very fine variety for baking. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 20c; 5 lbs., 75c; 10 lbs., \$1.25; 25 lbs., \$2.35; 50 lbs., \$4.50; 100 lbs., \$8.50.

170. Boston Yellow Eye. Almost every one who has lived in New England knows the Boston Yellow Eye Bean. While much larger quantities of white beans of the Navy type are used than of all other varieties combined, those who know about the Boston Yellow Eye prefer them to any other bean for cooking, as they possess a richness and flavor known to no other variety. As a shell bean they have no superior, and for cooking in a dry state, no equal. Any surplus one may grow above requirements may be easily sold at from \$1 to \$2 a bushel above the price of any white beans, when their superior quality is known. We strongly recommend the planting of the Boston Yellow Eye. Once used, they are always wanted. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 20c; 5 lbs., 75c; 10 lbs., \$1.25; 25 lbs., \$2.35; 50 lbs., \$4.50; 100 lbs., \$8.50.

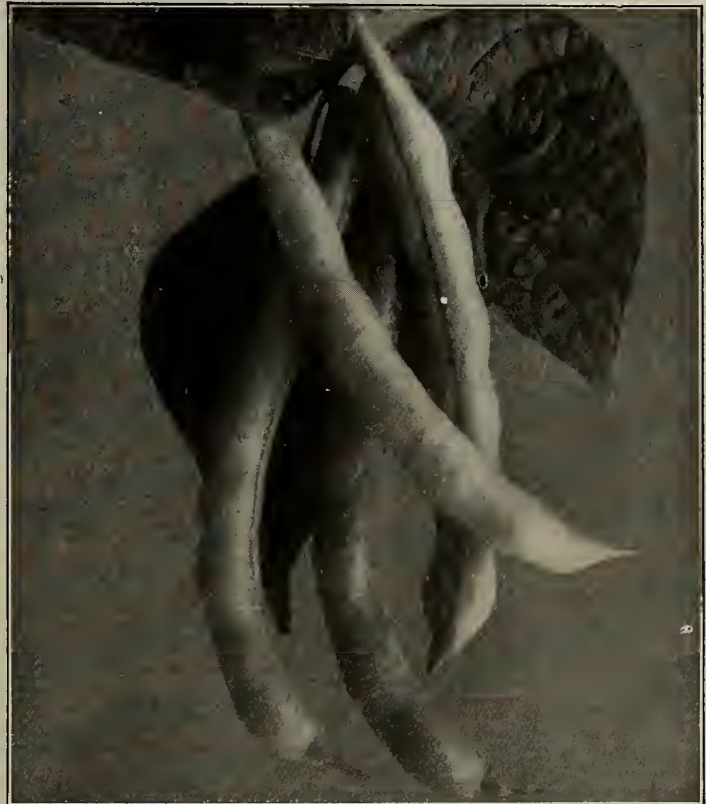
Cultivation. Next in importance to pure seed is the selection of the soil in which they are to grow. It is true that beans thrive on most all soils but greater results are gained by the liberal use of fertilizer or planting in light, rich, well drained loam. Beans are extremely sensitive to frost and moisture. It is useless to plant them before all danger of frost is past and the ground is warm. Sow the seed in drills three feet apart and four to eight inches apart in the row. They should be frequently cultivated up to the time of blossoming, but this should never be done when the ground or plants are wet with rain or dew, as it will be sure to injure them. If disturbed while in bloom, it will prevent their setting well.

Marketing. After the beans are harvested and threshed, run them through a fanning mill to take out all the broken beans, pods and stems. Hand picking will add considerably to their value, taking out all dark or discolored beans. If a canning factory be near, they will gladly pay a premium for clean, uniform seed. It is frequently desirable to ship the beans to a reliable commission house in the larger cities, or if that is not convenient, the country merchant will be willing to handle them for you.

The raising of beans will reward the grower on account of the price to be realized. On the Minneapolis Produce Exchange in October last No. 1 Navy Beans sold at \$2.50 to \$2.60 per bushel.

Please note prices on beans are prepaid only on packets and quarter pound lots. Postage rates on larger quantities given on page one.

Book on Vegetable Gardening. By S. B. Green. A manual on the growing of vegetables for home and market, treating on rotation, tillage, greenhouses, hot-beds, insects, etc. A thorough and practical guide to vegetable gardening. 265 pages. Price, cloth, \$1.00; paper covers, 50c, postpaid.



Stringless Green Pod Beans. See page 7.

BEET

Culture. Sow seed one inch deep in rows 15 to 24 inches apart in fertile, well pulverized soil, using 5 to 6 lbs seed per acre. An ounce will sow 50 feet of drill.

Cultivation should begin almost before the beets are up and continue until the plants shade the ground. When a few inches high, thin to six or eight inches apart in the row.

175. Northrup, King & Co.'s Sterling.

Sold only in Sealed Packages.



In this beet we offer our customers a decided novelty. It is as early as Eclipse, perfectly globe-shaped, with a single tap root, and of the richest color of any of the beets.

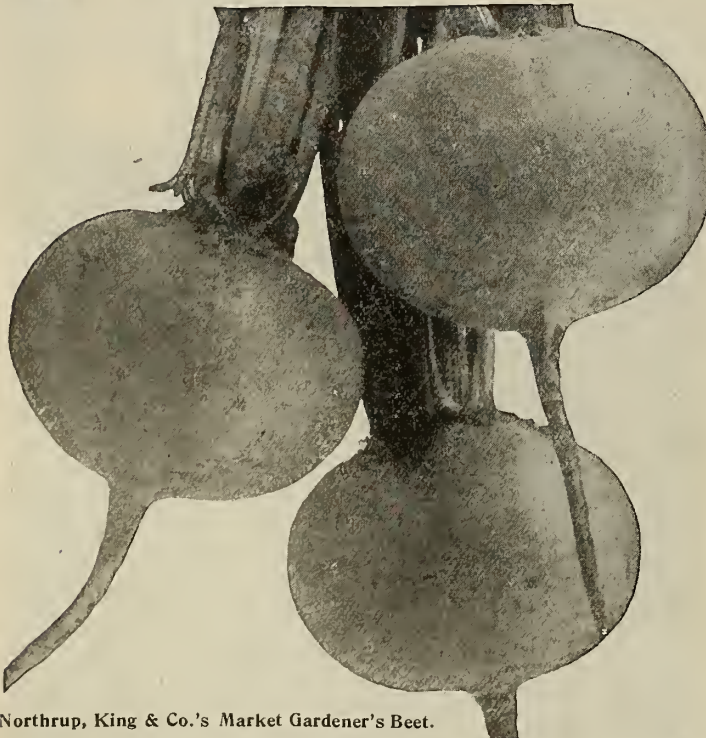
It is a splendid keeper, is not excelled in yielding qualities by any other sort, is exceedingly tender, fine and sweet and is unequalled for table use.

Market gardeners will find our Sterling a very profitable variety to grow, as no other sort approaches it in attractiveness. Exposed on the market by the side of other beets, it at once catches the eye of the customer and completely dwarfs in appearance all other sorts. Large pkt., 5c; oz., 15c; ¼ lb., 50c; lb., \$1.50.

180. Northrup, King & Co.'s Market Gardener's.



(Sold only in sealed packages) This is the ideal beet for market gardeners and the home garden. It is very symmetrical, with small tap root and but few fibrous roots; color outside is deep blood red, inside, layers of blood red and light red alternately. When cooked they are a beautiful dark red throughout, fine grained and unsurpassed in quality. It continues to grow until late in the fall, attaining a large size and making a good selling and eating beet for winter. One sowing only is necessary to produce early beets for market and main crop for winter use. Pkt., 5c; oz., 15c; ¼ lb., 45c; lb., \$1.35.



Northrup, King & Co.'s Market Gardener's Beet.

185. Crimson Globe. A very handsome variety of medium size, nearly globe-shaped, free from rootlets, leaving the surface smooth. The flesh is a rich, blood red of the best quality, sweet and tender, never stringy. Pkt., 5c; oz., 15c; ¼ lb., 40c; lb., \$1.25.

190. Crosby's Egyptian. An improvement on Extra Early Egyptian, being as early, but of more desirable shape, color and quality. It is very sweet and tender; a most valuable sort for early market as it is ready before any other beet of equal quality. Pkt., 5c; oz., 15c; ¼ lb., 50c; lb., \$1.50.

195. Detroit Dark Red. Roots globular; smooth with small tops; skin blood red; flesh dark red, zoned with a lighter shade; tender and sweet. See illustration on page 11. Pkt., 5c; oz., 15c; ¼ lb., 50c; lb., \$1.50.



Northrup, King & Co.'s Sterling Beet.

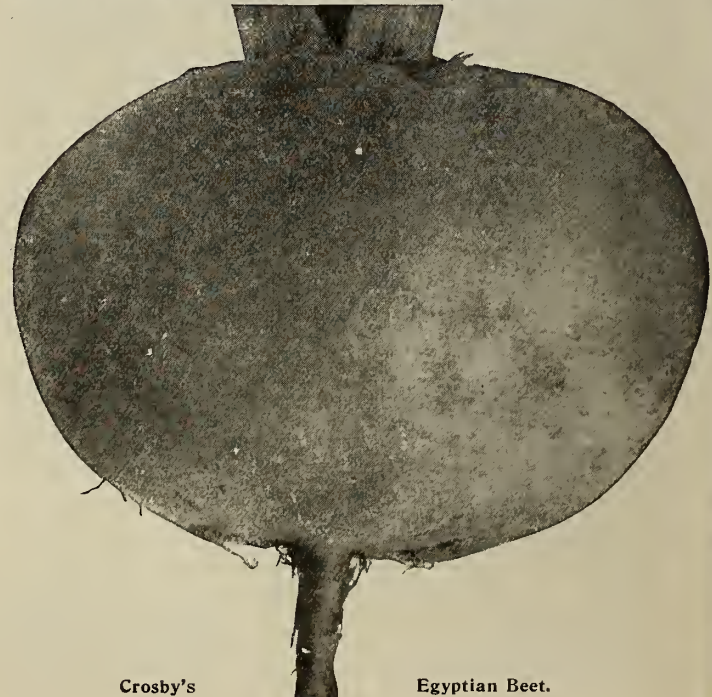
200. Early Blood Turnip. Roots turnip-shaped, deep crimson, tender and sweet. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 85c.

202. Early Model. A splendid variety for table use. It is medium early in maturity, being ready a few days before Crimson Globe. The roots of Early Model are of nice size and grow uniformly perfect, nearly globe-shaped with a slim, smooth tap-root. Leaves are small, colored dark crimson. The color and quality are excellent, flesh being tender, sweet, rich deep crimson and fine flavor. Makes a splendid selling beet on account of its fine appearance. Pkt., 5c; oz., 15c; ¼ lb., 50c; lb., \$1.50.

205. Eclipse. Makes rapid growth, top small, quality fine, larger than Egyptian, but not as deep a red in color. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00.

210. Edmand's Improved Blood Turnip. A handsome, clean, turnip-shaped blood beet. Skin and flesh are of a deep blood red, sweet and tender in quality, and unsurpassed for solidity and keeping purposes. The roots grow regular and are of right marketable size. Tops are small, allowing them to be grown close together. They mature early and give every satisfaction as a bunching sort. See illustration on page 11. Pkt., 5c; oz., 15c; ¼ lb., 40c; lb., \$1.25.

215. Extra Early Egyptian. The earliest. Turnip-shaped, blood color. Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., \$1.15.



Crosby's

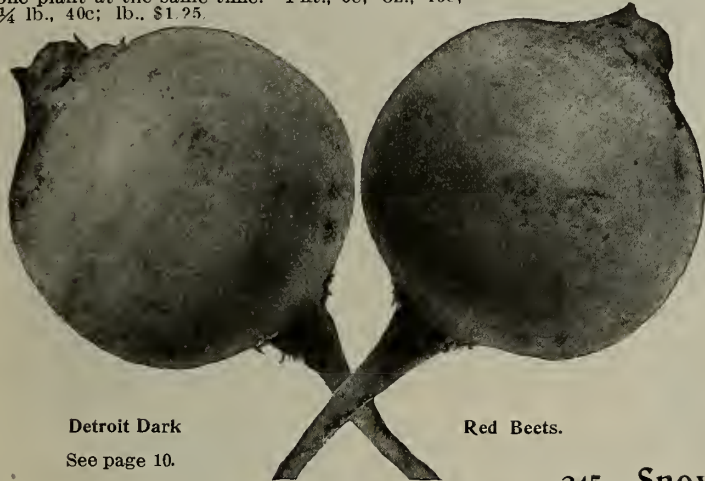
Egyptian Beet.

BEET

225. Half Long Blood. This is rapidly becoming a very popular sort and will probably produce more bushels from a given area than any other sort, as it does not occupy so much space in the row as the turnip-shaped varieties. Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., \$1.15.

230. Improved Long Blood. One of the best and most popular table beets, especially for autumn and winter use. Our seed has been grown from selected roots, and we can recommend it as a superior stock. Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., \$1.15.

235. Swiss Chard or Spinach Beet. This variety does not produce an edible root like the regular garden beet, but is highly esteemed for the broad, white leaf stalks and midribs which are cooked and served in the same manner as asparagus, making a most delicious vegetable. The leaves are also cooked like spinach and considered equally palatable. Two distinct dishes may thus be grown from one plant at the same time. Pkt., 5c; oz., 15c; ¼ lb., 40c; lb., \$1.25.



Detroit Dark

Red Beets.

See page 10.

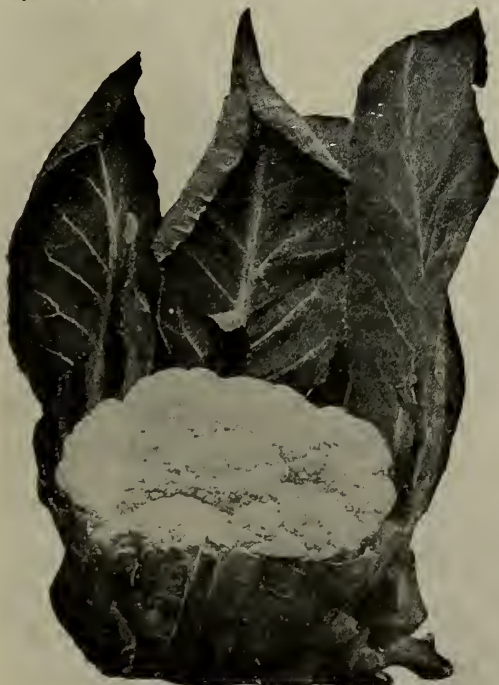
238. Giant Lucullus Swiss Chard.

The largest and best variety of Swiss Chard. Seed sown early in the spring will produce plants quickly from which the thick light-colored mid-ribs of the leaves may be cut down to the ground. New growth will quickly succeed it which may in turn be gathered. If the plants are allowed to grow on, an abundance of large curly leaves may be obtained, which make most excellent greens. No garden is complete without Swiss Chard, and the grower will be amply rewarded by giving it at least a small space. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00.

Book on Cabbage, Cauliflower and Allied Vegetables. By C. L. Allen. Gives complete instructions from seed time until harvest. Price, 50c, (postpaid, 55c).

We can supply books on almost all agricultural subjects. Write us for prices.

Notice. All vegetable and flower seeds sent prepaid except where noted.



Snow White Broccoli.

Edmand's
Improved Blood
Turnip Beet.
See page 10.

BROCCOLI

245. Snow White. Culture same as for late cauliflower. Forms heads very much like a cauliflower, but is much hardier, and gives excellent results in cool localities. It is not so valuable as the cauliflower in warm or dry climates, nor of such good quality. Pkt., 5c; oz., 35c; ¼ lb., \$1.00; lb., \$3.50.



BRUSSELS SPROUTS

Brussels Sprouts are highly valued in all European countries, but are not generally appreciated here. Thousands and thousands of native born Americans have never tried them and do not know what palatable and nutritious vegetables they are. They should be in every garden.

Culture same as for early or late cabbage, depending on whether an early or late crop is desired, with the exception that the seed should be sown a few days earlier and when the plants are planted out they should be set 15 in. apart in rows 2 ft. apart. 1 oz. will sow 200 ft. of drill.

240. Improved Dwarf. The stem which usually grows from 20 inches to 2 feet in height, is covered with "miniature cabbages" which may be boiled like cabbage or cooked in cream like cauliflower. They are by all means the most delicious and delicately flavored of the cabbage family. On this variety the heads grow very closely and its quality is the finest. Pkt., 5c; oz., 15c; ¼ lb., 40c; lb., \$1.25.

242. Dalkeith or Perfection. Plants are of dwarf growth and stems are thickly set with large, solid sprouts. This variety is very hardy and even during quite severe weather, the plants maintain their sprouts; in fact the flavor and quality is much improved by frost. Pkt., 5c; oz., 15c; ¼ lb., 50c; lb., \$1.50.



**NORTHROP, KING & CO.'S
IMPROVED MAMMOTH LONG
RED MANGEL**

MANGEL WURZEL

For Stock Feeding.

We have our seed grown under contract in England by experts, as there is no other place in the world where Mangel and Ruta Baga are produced to such perfection. Mangel and Ruta Baga seed can be grown in the south of France for less than one-half the price we pay for our seed, but as it cannot be depended upon to give satisfaction we do not handle it.

Culture. Sow 6 pounds to the acre in May or June, in rows three feet apart, and thin to nine inches in the row. Cultivate frequently with horse tools.

250. Northrup, King & Co.'s Improved Mammoth Long Red Mangel.

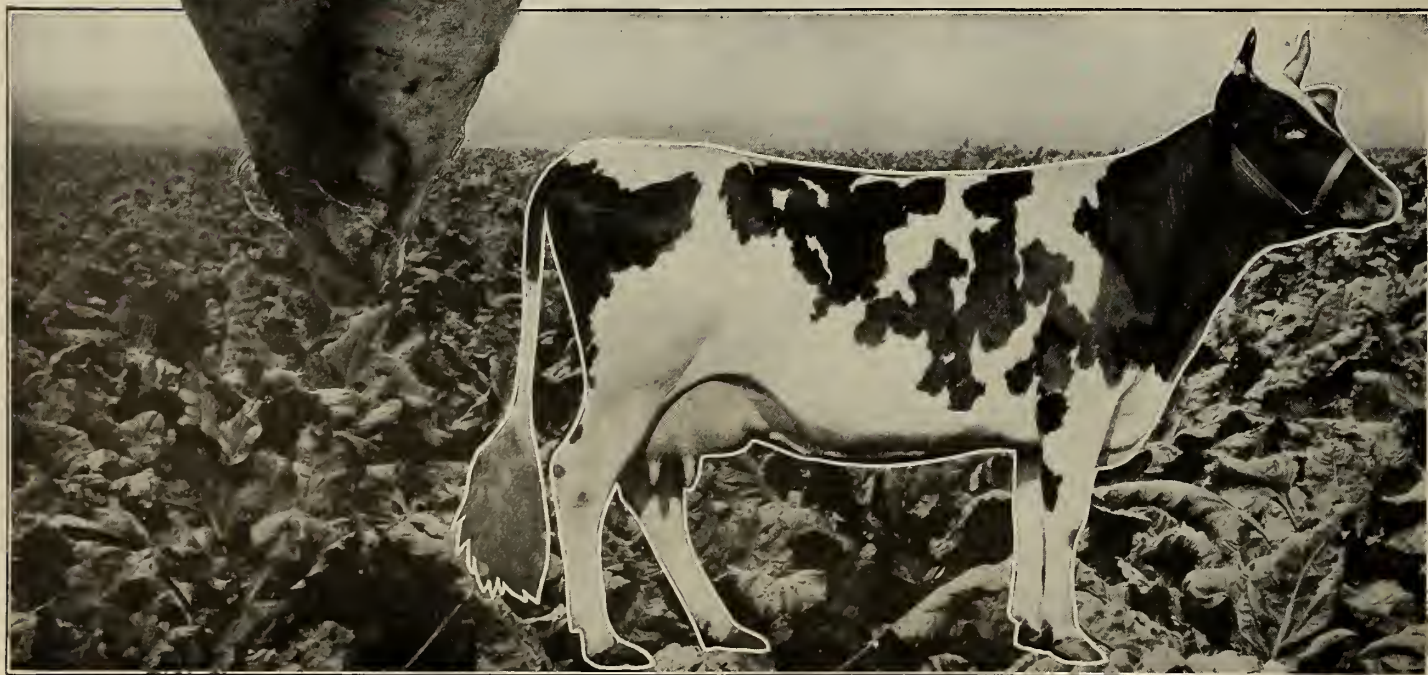
(Sold only in sealed bags.)



Farmers and stock raisers of the United States do not appreciate so fully the value of mangels for feeding cattle, hogs, sheep, etc. as do the farmers of Europe. In Germany, Great Britain and other European countries, it is the exception rather than the rule where mangels are not grown on a large scale on every farm. The immense yield which may be secured from an acre, with very little expense either for material or labor, makes the mangel crop one of the most profitable on the farm. 15 to 20 tons of roots an acre is not an unusual yield, some specimens weigh 20 to 30 lbs. each. Where properly cultivated, seeded and harvested the cost of growing a bushel of our Improved Mammoth Long Red Mangel should not exceed 5c. When fed in combination with grain they are worth almost as much, pound for pound, as the grain. This statement may seem absurd, but experience has proved that mangels so aid digestion and assimilation, by keeping the animals in a healthy condition, that they increase the feeding value of other feeds consumed, beside the nutrients the roots contain.

Our stock of Improved Mammoth Long Red Mangel is a selection and the seed is especially grown for us in Europe. The roots are very large, uniformly straight and well formed; color, deep red; roots, straight; tops, small.

Every farmer ought to put in at least an acre of Mangels this coming season, 5 or 10 acres will be much better. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 15c; lb., 45c. By express or freight at purchaser's expense, 10 lbs. @ 30c per lb.





MANGEL WURZEL

For Stock Feeding.

255. Northrup, King & Co.'s Improved Golden Tankard.

(Sold only in sealed bags.) We have for years, insisted that this was the best Mangel grown and each season strengthens us in the position we took when it was a comparatively unknown sort. We recommended it unreservedly as the best Mangel for dairy farmers. It combines apparently all the fine points possible to condense into a Mangel. The skin is a deep rich yellow. The flesh is firm and solid and a rich golden yellow in color. On account of its shape enormous crops are grown, and it is easily lifted from the ground. Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 45c. By express or freight, at purchaser's expense, 10 lbs. @ 30c per lb.

256. Crimson Tankard. In appearance it closely resembles the favorite—Golden Tankard. It is adapted to all soils, is easily lifted from the ground and is a very productive sort. Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 50c. By express or freight, 10 lbs. @ 35c per lb.

258. Danish Sludstrup. The Danish Government encourages the growing of root crops by offering certificates of merit to growers who select and produce sorts which are of distinctive value. Sludstrup is considered the best of all mangels having been awarded first class certificate. In color it is reddish-yellow and of a distinct type. It contains the largest per cent of nutriment found in any sort. It is very hardy, grows well above ground and is easily pulled. Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 50c. By express or freight, 10 lbs. @ 35c per lb.

265. Mammoth Golden Giant. Very large. Remarkably even in shape, of vigorous growth; has a fine neck and a very smooth skin. Flesh white, firm and sweet, much liked by cattle. Easily lifted from the ground, producing enormous crops. Excellent keeper, yields 40 to 60 tons an acre. Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 50c. By express or freight, at purchaser's expense, 10 lbs. @ 35c per lb.



260. Giant Red Eckendorf. A very popular variety grown in Germany, in which country root crops are grown on a very large scale. It has also proved very satisfactory in the United States whenever it has been tried. The roots are smooth, long and cylindrical in shape, very much like the tankard mangels. They are very heavy, weighing up to 15 and 20 pounds each. The flesh is firm, crisp and solid, white in color and of high feeding value. This variety is easily harvested, a large proportion growing above ground. Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 50c. By express or freight, at purchaser's expense, 10 lbs. @ 35c per lb.

262. Giant Yellow Eckendorf. The same as the previous variety except the skin is yellow. Very desirable in all respects. Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 50c. By express or freight at purchaser's expense, 10 lbs. @ 35c per lb.

270. Yellow Globe. It has a very small top and few leaves, leaf stalk and blade green; root medium sized, globe-shaped, having a small tap and few side roots; skin, deep orange-yellow in color; flesh white and of excellent quality. The root grows almost entirely above ground, making it well adapted to shallow soil and very easy to harvest. Oz., 5c; ¼ lb., 15c; lb., 50c. By express or freight at purchaser's expense, 10 lbs. @ 35c per lb.

Seeding and Cultivation.

Where mangels are extensively grown, the seed should be sown with a machine. Small fields may be sown with a hand drill, which will do good work and is very satisfactory. Do not crowd the rows because much of the root grows above the surface and plenty of space should be allowed for a horse and cultivator. Three feet apart is about right.

Freezing injures beet plants. Therefore, seed should not be sown until the ground is warm and the weather fully settled, say about corn planting time.

The quantity of seed required per acre will vary somewhat with the variety. It pays to be generous with the seed and insure a good stand of plants. Shallow planting is desirable because the seed germinates more quickly and a larger proportion will make vigorous plants than when planted deeply. One-half to one inch of well packed earth is sufficient covering for beet seed, when there is a good supply of moisture in the sub-soil. Deeper planting will be required on sand lands or when the soil is dry. Cultivation should begin within a day or two from planting. Thin the plants to nine inches apart in the row.

SUGAR BEETS

For Sugar Making.

Sugar Beets are now extensively grown in many sections of the country where sugar beet factories are located and the large yields per acre and the price secured for the crop make them very valuable. Sugar beets may also be used for stock feeding as they contain 12 to 15 per cent of sugar in addition to other nutrients. Sugar beets are ripe and in condition to harvest when the lower leaves begin to take on a yellow tinge and droop. Beet tops make an excellent food for cows, sheep and other live stock. This is also true of the pulp from the factory. A large sugar beet factory in Montana, having an immense output, grows in connection with their sugar beets a large acreage of alfalfa. They then buy up thousands of sheep and make a practice of feeding them for the market on the combination of beet pulp and Alfalfa, and the results are very remunerative.

282. Jaensch's Victrix. Undoubtedly the most highly developed variety for sugar making. Roots of medium size, white skin with tinge of gray, half long and very uniform in size and shape. Flesh white and very rich in sugar. Pkt.,

5c; oz., 10c; ¼ lb., 20c; lb., 60c. By express or freight at purchaser's expense, 10 lbs. @ 45c per lb.

285. Vilmorin=Elite. This beet is the result of thirty-five years of methodical and persevering selection. In black soils rich in organic matter, it gives results equal to any other variety. Its average yield may be stated as from 12 to 16 tons an acre. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c. By express or freight at purchaser's expense, 10 lbs. @ 45c per lb.

290. Klein Wanzlebener=Elite. This variety at the present time has probably a wider cultivation than any other Sugar Beet. It may be distinguished from the Vilmorin by its brighter color and its lighter colored leaves, which are beautifully undulating, and scalloped about the edges. While not, as a rule, equal to the Vilmorin in saccharine richness, it is considerably more productive. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c. By express or freight at purchaser's expense, 10 lbs. @ 45c per lb.

For Stock Feeding.

The ground should be thoroughly prepared and made firm and mellow, same as for mangels. Seeding and cultivation should be continued in much the same manner except that they should be thinned out 6 to 8 inches in the row. The Giant Feeding Sugar Beets or Half Sugar Mangels are especially valuable for feeding stock as they give a feed of much greater nutritive value than mangels.

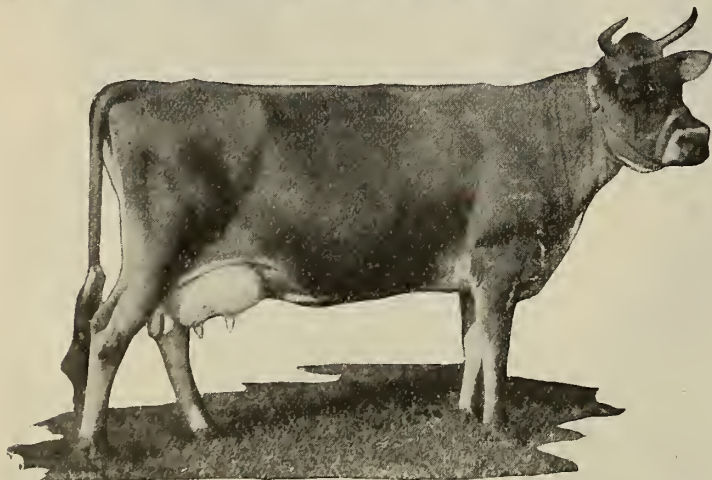
275. Giant Feeding Sugar Beet or Half Sugar White Mangel.

This magnificent Sugar Beet while giving nearly as large a yield of easily grown and harvested roots as a crop of Mangels, supplies a food of very much higher nutritive value, the roots for feeding purposes being really more valuable, pound for pound, than those of the very best strains of Sugar Beet, and the yield under equally favorable conditions being more than double. The roots grow partly out of the ground and because of this and their shape the crop can be harvested and stored at less expense than any other root crop. We are certain that every one who plants this variety and grows it with care will be much pleased. Every farmer should try it. Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 50c. By express or freight, 10 lbs. @ 35c per lb.

277. Royal Giant Sugar Beet or Half Sugar Rose Mangel.

Very similar to Giant Feeding Sugar Beet except in color. The skin is bright rose above ground and white below. Flesh white, sometimes tinged with rose. Roots grow half out of the ground and are thus easily harvested. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 55c. By express or freight, 10 lbs. @ 40c per lb.

280. Sugar Beet for Stock Feeding. We can furnish ordinary seed of Sugar Beet, which will give a large yield and tonnage. Oz., 5c; ¼ lb., 15c; lb., 45c. By express or freight, 10 lbs. @ 30c per lb.



A Full Blooded Jersey.

Sugar Beets and Mangels When Fed to Milch Cows Materially Increase the Flow of Milk.

Seeding and Cultivation.

As in the case of mangel; the best seed obtainable, regardless of the price, is the cheapest in the end. Sugar beet seed is not a high priced article and the expense of seeding an acre of land is very small when compared to the value of the crop. A maximum yield of 15 to 20 tons an acre is possible with the best seed, while lower priced seed may produce barely enough to pay the cost of cultivation and handling.

The time of planting should be determined by the condition of the soil, the locality and season. Sandy soil becomes warm and dry much earlier than heavy clay loam. Tillage also has a tendency to increase the warmth in the soil. Do not plant sugar beets until the soil is warm enough to germinate corn. When oak leaves burst their buds, corn and beets may be planted with safety. Be liberal with the seed in order to secure a good, uniform stand of plants. A surplus is much more desirable than thin seeding. It often happens that a crust is formed on the surface which a scant seeding will not break through in the plants' effort singly, to reach sunlight, but collectively they will aid each other in breaking the surface. The depth of planting must also be determined by local conditions of the soil, season, etc. Deep planting should be avoided because it often prevents germination when shallow planting, say one-half to one inch, will produce satisfactory results. The distance between rows will depend somewhat on the soil and methods of cultivation employed. Rows 18 inches apart will produce the largest returns in yield, but these cannot be cultivated with a horse. Hand labor is expensive; therefore, we advise planting 20 to 24 inches between rows, using a 4 to 6-row planter for the purpose.

Cultivation should commence immediately after planting by following the rows indicated by the press wheel. Before the plants appear, cross rows with a light hand weeder, made by driving ten-penny nails through a board, and used as a harrow, which will break the surface crust and maintain an earth mulch to prevent the escape of soil moisture. This process may be repeated two or three times with excellent results.



Giant
Feeding
Sugar Beet or
Half Sugar
White
Mangel.

CABBAGE

ARRANGED IN ORDER OF EARLINESS.

Culture for Early Cabbage. Seed of the early varieties should be sown $\frac{3}{4}$ of an inch deep in a greenhouse, hot-bed, or in boxes in the house, about 6 weeks before the plants are needed for planting out.

If, when the second leaves appear, the plants can be transplanted, spacing them 3 inches apart, better and more hardy plants will be obtained.

As soon as the soil can be worked in the spring the plants should be removed to the open field and set in rows 2 feet apart each way. Cultivate occasionally to keep out weeds and preserve the moisture in the soil until the plants shade the ground.

One-half lb. seed will produce plants for one acre.

Culture for Late Cabbage. The seed may be sown in rows 1 foot apart or broadcast in the garden, about the middle of May, and the plants set in the field the latter part of June, or it may be planted in hills 30 inches apart, 4 to 5 seeds to the hill, in the field where the cabbages are to grow, thinning to one plant in a hill when the plants are 3 to 4 inches high.

Cultivation must begin as soon as the plants are set in the field, or as soon as seed sown in the field is up and continued as long as it is possible to get through them with a horse cultivator without injury to the plants.

Where the seed is sown in the field, whether it be in rows or in hills, it should be covered with $\frac{3}{4}$ of an inch of soil and this soil firmed well to insure rapid germination.

One-half lb. seed sown in a bed will produce plants for one acre.

Cabbage Plants. See page 102 for both early and late varieties.

295. Northrup, King & Co.'s Washington Wakefield Cabbage.

"First in Head, First in Market,

First in the Hearts of Gardeners."

Sold only in Sealed Packages.



We introduced this remarkable cabbage nineteen years ago. It met with so hearty a reception from every one who grew it that it seemed as though every one who tried it must have written to make known their satisfaction. Every year we receive a great many letters of praise and congratulation regarding the Washington Wakefield Cabbage. No other cabbage of which we have knowledge has aroused such enthusiasm among cabbage growers as has our Washington Wakefield. It has the same general characteristics of other Wakefield cabbages, the heads being conical with a rounded or blunt point. It is however, far superior to other strains of Wakefield cabbage, being nearly double the size and of better quality, and at the same time is fully as early. It has few outer leaves, permitting close planting, so that more heads can be grown to the acre than with other sorts. Large pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., 90c; lb., \$3.00.

The Best Early Cabbage

Your Washington Wakefield Cabbage is the best early variety I ever raised. ANNIE OLIVER, Iowa.

Couldn't Get Along Without It

I could not get along without the Washington Wakefield Cabbage. It is good both for early and late. (MRS.) C. W. MENSER, N. D.

Two Weeks Ahead

Your Washington Wakefield Cabbage was the best I ever saw. Had cabbage two weeks before any one else. (MRS.) DAN BILADEAU.

325. Early Jersey Wakefield. Heads are very hard, compact, solid and conical in shape. Few outside leaves. We do not admit that our stock has any superior, except Northrup, King & Co.'s Washington Wakefield Cabbage. Pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., 85c; lb., \$2.75. See illustration page 16.

310. Charleston Wakefield. Very similar to the Jersey Wakefield, but a few days later and half as large again. Not quite as pointed as the Jersey. Pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., 85c; lb., \$2.75.

345. Express. A very early variety forming small oval heads, with round, thick leaves. The head is a little thicker, less pointed and slightly later than the Early Jersey Wakefield. A fine shipping sort. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 45c; lb., \$1.50.



340. Early Winnigstadt. Very early. The leaves are dark green and very tightly folded, making it the hardest of any early cabbage. This variety seems to suffer less from the cabbage worm than most other sorts. Heads are regular, conical and keep well both summer and winter. Our seed has been especially selected. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.50.

342. Early York. A very early variety. Heads, small, heart-shaped, firm and tender. May be planted 15 to 18 inches apart. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 45c; lb., \$1.50.

298. Copenhagen Market. A new early variety, which will be very popular with market gardeners. It is the finest large, round-headed, early cabbage in cultivation. It is further desirable on account of the remarkable characteristic of maturing the heads all at the same time, enabling the grower to gather his crop with less expense and permitting the cleaning of the land at the first cutting. The heads average about ten pounds each in weight, are hard and solid with small core. The quality is extra fine and sweet. It matures as early as the Wakefields and will yield more to the acre in weight. It is a short stemmed variety, the heads nearly resting on the ground. The leaves are light green, rather small, saucer-shaped and tightly folded, making it possible to set them close together in the field. Pkt., 10c; oz., 50c; $\frac{1}{4}$ lb., \$1.50.

299. Glory of Enkhuizen. A variety of recent introduction from Holland. It is a valuable sort on account of its earliness, large size and fine keeping quality. The heads are of nice size for market, weighing about 9 to 11 pounds each, globe-shaped and handsome dark green in color. For an early sort, the heads are unusually firm and solid. The leaves are fine ribbed, tender and of excellent quality. The outer leaves set close, permitting planting of more heads to the acre, thus increasing the yield. This is not only valuable as an early variety, but as it grows large it may be profitably raised for main crop for fall use. With market gardeners this sort is sure to be popular because of its many valuable characteristics. Pkt., 10c; oz., 40c; $\frac{1}{4}$ lb., \$1.25; lb., \$4.00.



Heads of Copenhagen Market Cabbage.

Note the Solidity of the Cross Section.

CABBAGE

300. Northrup, King & Co.'s Discovery.

Sold only in Sealed Packages.

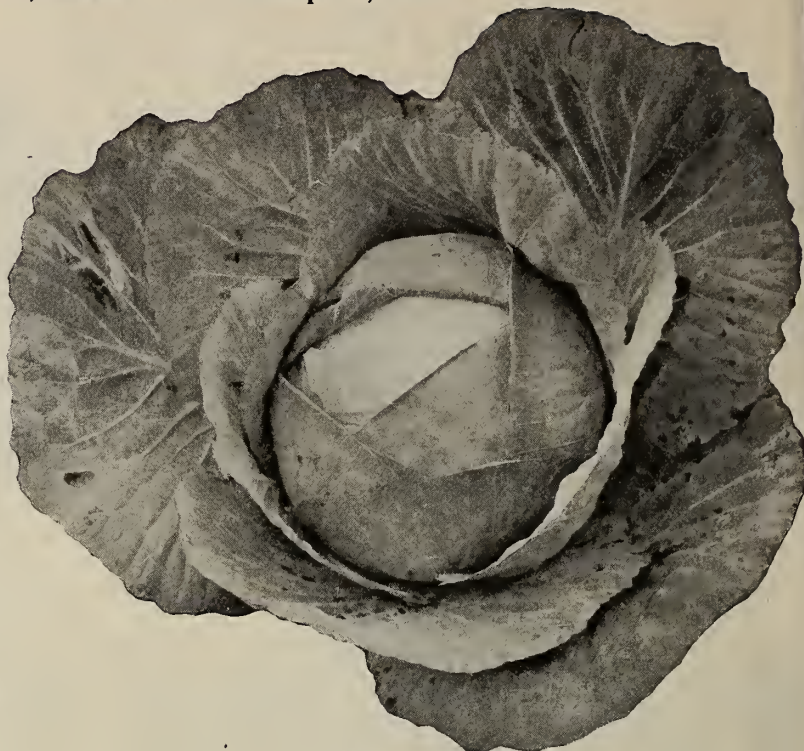


This valuable cabbage fills a very distinct field as the earliest flat heading sort. Truckers generally prefer flat heading cabbages to the pointed sorts, but up to this time, none have been developed that are as early as the Wakefields. Our Discovery Cabbage is as early as the Wakefields, in fact it might properly be termed a Flat Wakefield, for it has the thick, heavy leaves of the Wakefields. Here, however, the resemblance ceases as the head is distinctly flat and of compact growth. This enables the grower to plant closely, and he can secure a large crop from an acre because it is so reliable about heading. The heads are, as a rule, quite as large as those of the Early Spring, and enough earlier in our judgment to make it more profitable to gardeners, besides being, we think, less subject to disease. Large pkt., 10c; oz., 30c; ¼ lb., 90c; lb., \$3.00.

305. Allhead Early. Earlier than any other large cabbage, larger than any other early cabbage. Heads deep, flat, solid, uniform and very tender owing to its rapid growth. An all-the-year-round cabbage. We consider this one of the best second-early sorts on our list and recommend it both for home and market use. Pkt., 5c; oz., 30c; ¼ lb., 85c; lb., \$2.75.

330. Early Spring. A flat heading sort which has become popular on account of its earliness. The head is very solid and shapely, and as it forms quickly, may be marketed at a very early stage of its growth, enabling the grower to realize fancy prices. The quality is excellent, tender and of fine flavor. Prices, pkt., 5c; oz., 25c; ¼ lb., 75c; lb., \$2.50.

335. Early Summer. Deservedly popular with market gardeners throughout the country. It forms large, solid, round, flattened, compact heads of excellent quality, tender and sweet. The heads average over double the size of the Jersey Wakefield, weighing eight to ten pounds each, while it matures only ten or twelve days later. Pkt., 5c; oz., 30c; ¼ lb., 85c; lb., \$2.75.



Early Summer Cabbage.

358. Early Dwarf Blood Red. Earlier than Rock Red, but not quite so large. The heads are hard, keep well and are of excellent quality. In color they are deep blood red and are considered fine for pickling. Pkt., 5c; oz., 30c; ¼ lb., 90c; lb., \$3.00.

347. Fottler's Improved Brunswick. An ideal second early variety of the drum-head type. Very desirable for the home garden on account of its dwarf compact growth and few outer leaves. Head large, flat, solid and of excellent quality. Valuable as an intermediate variety, also for late use. Pkt., 5c; oz., 25c; ¼ lb., 75c; lb., \$2.50.

348. Improved American Drumhead Savoy. The best variety of Savoy or crumpled leaf cabbage. The plant is vigorous, with short stem, has densely crumpled leaves and when touched by frost is sweet, delicate and delicious. The head is large and very solid. Pkt., 5c; oz., 25c; ¼ lb., 75c; lb., \$2.50.

385. All Seasons. A grand variety. We can safely recommend the All Seasons Cabbage as one of the best and surest cabbages to grow. It is a little later than Early Summer, but very much larger, (about double the size) and for the market gardener one of the most useful, marketable and profitable cabbages to grow. It is perhaps the safest variety for the amateur to plant as it does well at all seasons and is a very sure cropper. The heads are dark blue in color and being tender and fine keeping are excellent for fall and winter use as well as during the summer. Pkt., 5c; oz., 30c; ¼ lb., 90c; lb., \$3.00.

315. Danish Ball-

head. This winter variety is especially desired on account of its great solidity and its keeping qualities. They weigh more than other sorts of equal size. The heads are crisp, tender and sweet, and unsurpassed for boiling, slaw, sauerkraut, etc. It grows well on all soils and under most conditions, withstanding hot, dry weather, and does not rot in wet seasons. Pkt., 5c; oz., 25c; ¼ lb., 75c; lb., \$2.50.

320. Danish Roundhead.

An earlier, shorter stemmed, improved strain of the Danish Ballhead Cabbage. The heads are hard, very solid and mature about two weeks before the Ballhead. Also averaging a little larger and heavier. The inner leaves are blanched almost pure white, are of sweet flavor, crisp and tender. It is less liable to blight and shows vigorous growth even in the hot summer. Pkt., 5c; oz., 25c; ¼ lb., 75c; lb., \$2.50.

Danish Roundhead Cabbage.

and heavier. The inner leaves are blanched almost pure white, are of sweet flavor, crisp and tender. It is less liable to blight and shows vigorous growth even in the hot summer. Pkt., 5c; oz., 25c; ¼ lb., 75c; lb., \$2.50.

350. Large Late Drumhead. Grows a very large, solid head often reaching a weight of twenty to thirty pounds. There is little outer foliage, the leaves all folding in closely about the head. A fine winter variety. Pkt., 5c; oz., 30c; ¼ lb., 85c; lb., \$2.75.

405. Long Keeping. As the name indicates, this variety is a good keeper, and it is also superior as a main crop. It will stand drought and frost to a remarkable degree. Heads are uniform, large, firm and solid, and of very superior flavor; color dark green, with few outside leaves. If placed in a dry, cool cellar or pit, they will keep in excellent condition until well along in the following summer. Pkt., 5c; oz., 25c; ¼ lb., 75c; lb., \$2.50.

Booklet on Cabbage Culture. A concise, up-to-date, pocket treatise on growing of cabbage, including soil preparation, sowing seed, cultivation, harvesting, storing and sale. Of value to every grower of cabbage. It will be sent free with orders, if requested, or will be sent by mail, postpaid, for 5c in stamps.

Cabbage Plants.
For both early and late varieties, see page 102. Ready from April 15th until June. Every order given careful attention.



Early Jersey Wakefield Cabbage.



CABBAGE

390. Northrup, King & Co.'s Holland. Danish Grown Stock.

Most remarkable late cabbage yet produced, heads hard and solid—fine grained and tender. Entirely distinct in color. Very finest short stemmed type.



(Sold only in sealed packages.) In some important particulars this is the most remarkable cabbage yet produced. In fact, it well illustrates the truth that "merit will win," in that while it was introduced only a few years ago, it has already become the favorite sort with those who have had the true stock. The heads, which are very solid and deep, are of medium size, averaging about 8 lbs. in weight; in color they are entirely distinct; in point of quality they have no superior, and they keep better than any other sort, heads being as solid and perfect when taken up in the spring, as when put away in the fall. At that time no cabbage will sell beside them, even at one-half the price. Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 75c; lb., \$2.50.

370. Northrup, King & Co.'s Harvest Home.



(Sold only in sealed packages.) We have yet to see the cabbage of equal quality that will yield as large a weight from a given area as the Harvest Home. Fifteen tons an acre is not an unusual yield and greater results have been attained under favorable conditions. We have yet to see the cabbage that will equal it in reliability of heading, uniformity of size and solidity of head. We unhesitatingly recommend it to any one desiring the best cabbage for fall and winter keeping or kraut making. Pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., 90c; lb., \$3.00.

375. Northrup, King & Co.'s Premium Late



Flat Dutch. (Sold only in sealed packages.) A low growing variety, heads large, bluish-green, round, solid, broad and flat on top; an excellent fall and winter variety, and a good keeper. It is a sure header. Our stock has been grown from carefully selected heads, and we consider it superior to any other strain of Flat Dutch Cabbage on the market. Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 75c; lb., \$2.50.

380. Late Flat Dutch. (Regular Strain). Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 75c; lb., \$2.25.

355. Rock Red. The best, largest and surest heading red cabbage. Used mostly for pickling. The plant is large, with several spreading leaves. The head is large, round, very solid and of deep red color, averaging from ten to twelve pounds in weight. Pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., 85c; lb., \$2.75.

365. Surehead. Heads are large, round, flattened, uniform, very hard, firm and sweet, and average from ten to fifteen lbs. each. Certain to head, a good shipper and a fine keeper. Pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., 90c; lb., \$3.00.

401. Autumn King. Large solid heads, similar to Flat Dutch, with ruffled outer leaves. Needs long growing season. Pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., 90c; lb., \$3.00.

All vegetable seeds sent prepaid except where noted.



A Field and Specimen Head of Northrup, King & Co.'s Holland Cabbage.

360. Succession. About a week later than Early Summer, but much larger, measuring about twelve inches in diameter and weighing about ten to twelve pounds each. The heads are hard and solid and of fine quality. Very fine for either winter or summer use. One of the surest varieties to make a crop under all conditions, and does well in all seasons no matter when planted. Pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., 85c; lb., \$2.75.

400. The Volga. The quickest growing, large late variety. Uniform in growth, head hard and solid. It is two or three weeks earlier than other large kinds. The plant is nearly all head having few outside leaves. The heads are nearly as round as a ball and as hard and solid as Danish Ballhead, while they are much larger and heavier, often weighing 15 lbs. each.

The quality of this cabbage is very fine both for cooking and for kraut. It will keep perfectly all winter if kept cool.

If the plants are set out early they will head in July and August and can be used as a summer and fall variety. We are sure this cabbage will prove a most profitable one to all who raise it. The plants are so compact that they can be set out $1\frac{1}{2} \times 3$ ft. and will produce enormous crops on good rich land, and fair crops on land that would not produce a ton to the acre of some other varieties. Pkt., 10c; oz., 35c; $\frac{1}{4}$ lb., \$1.00; lb., \$3.50.



Northrup, King & Co.'s Premium Late Flat Dutch Cabbage.

CARROT

Culture. For the best results the soil should be well worked to a good depth. For early use sow seed in rows 15 inches apart as early in the spring as the soil can be worked, sowing about 4 lbs. of seed per acre and cover the same with $\frac{1}{2}$ inch of soil; but for main crop, sow about corn planting time, using 3 lbs. of seed per acre and the seed should be covered with nearly an inch of soil. One ounce of seed will sow 100 feet of drill. Make the rows two feet apart to allow for horse cultivation. Keep free from weeds and cultivate occasionally until the roots are large enough for table use and if grown for commercial purposes they may be cultivated with profit throughout the season.

When the plants are 3 inches high thin to 3 inches apart in the row.



410. Northrup, King & Co.'s Chantenay.

packages.) As a table variety it is first-class; in shape it is larger than the Scarlet Horn, and also broader at the shoulder. The flesh is of a beautiful, rich orange color and of the finest quality; it is medium early, with small tops. Roots taper slightly, but are uniformly stump rooted. Gives great satisfaction in both the market and private garden. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 45c; lb., \$1.50.

Market Gardener's Stock.
(Sold only in sealed

415. Chantenay.

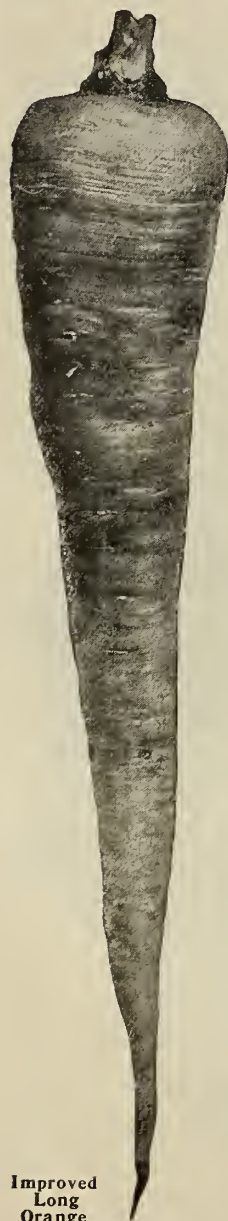
Regular Stock. Same as is ordinarily sold for Chantenay Carrot. This has not been as highly selected as our Market Gardener's stock, but will give good satisfaction. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

420. Early French Forcing.

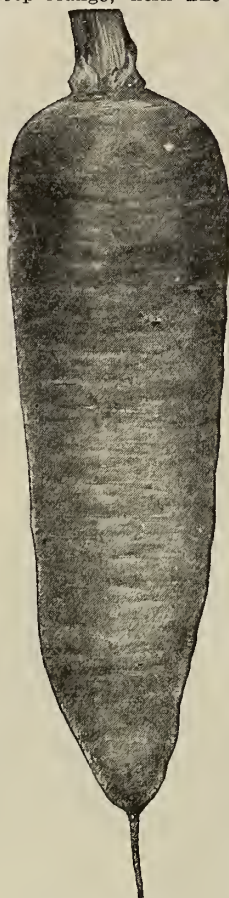
The earliest variety, largely grown for forcing purposes; globular-shaped root of an orange red color. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 45c; lb., \$1.50.

425. Early Scarlet or Short Horn.

One of the most popular varieties grown; color deep orange; flesh fine grained and of agreeable flavor; tops small; has a short, stump shaped root. Grows well in shallow soil; one of the best for early out-door planting and for table use. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.



Improved
Long
Orange



Improved Danvers
Half Long.



Chantenay.



Half Long
Scarlet Nantes.

430. Improved Danvers Half Long.

Our strain of this popular carrot, while not as "stump rooted" as the Chantenay, has a root which comes to a blunt point, a very beautiful carrot. A first-class carrot for all soils; in form midway between the Long Orange and the Short Horn. The root is of a rich, dark orange color and grows very smooth and handsome; twenty to thirty tons per acre not being an unusual crop. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

435. Improved Long Orange. A well known standard sort; roots long, thickest near the crown, tapering regularly to a point; color deep orange, suitable for the table and main field crop. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

438. James Intermediate. A splendid variety, in shape midway between the half long and the long sorts. It is quite broad at the top and tapers to a blunt point. Flesh is rich reddish-orange, tender and sweet. Very desirable as a market variety, on account of the heavy yield, fine shape and appearance and excellent quality. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 85c.

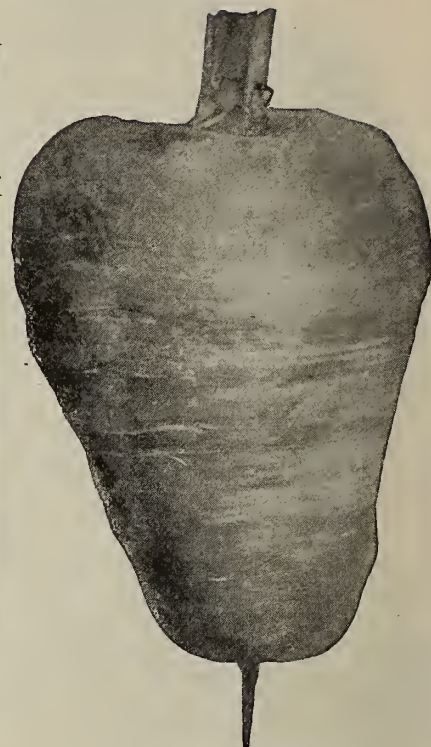
440. Half Long Scarlet Nantes, Stump

Rooted. Tops of medium size; roots cylindrical, smooth, bright orange; flesh orange, becoming yellow in center, but with no distinct core. Of the finest quality and one of the most symmetrical and handsome of the medium sized sorts; excellent for the market or home garden. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 45c; lb., \$1.50.

445. Oxheart or Guerande. This fine and very popular carrot is intermediate as to length between the half-long varieties (such as Danvers) and the Scarlet Horn Carrots, but is much thicker than the latter, being at the top from four to five inches in diameter. Flesh bright orange, fine grained and sweet. It is of very fine quality for table use and equally good for stock. Where other sorts require digging, Oxheart can be easily pulled, making it a particularly desirable sort for soils so stiff and hard that other sorts do not grow well. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

"Handbook for the Garden" is the title of a 24 page booklet which includes information on preparing and fertilizing the soil for garden crops, how to make hot-beds and cold frames, transplanting, watering and cultural directions for all vegetable and flower seeds. In it are found also hints on growing roses and shrubs and tables showing quantities of vegetable seeds to sow in a given length of row and per acre. This booklet will be included with your order if requested or will be mailed free to any address. It contains much valuable information in small space.

For home use and early bunching Oxheart, Chantenay and Nantes are the best, for general crop the Danvers Half Long, while for feeding stock the Mastodon yields the largest crops.



Oxheart or Guerande.



James Intermediate.

450. Northrup, King & Co.'s CELEBRATED MASTODON CARROT

For Feeding Stock.

Sold only in Sealed Packages.



If you are a farmer we want to urge just one thing on you. It is this—try our Mastodon Carrot. There may be room for difference of opinion regarding many varieties of seeds, but there cannot be room for difference of opinion as to which is the best stock carrot.

Northrup, King & Co.'s Mastodon Carrot is not, properly speaking, a table carrot, although the flesh is remarkably firm and sweet. It is not a carrot for the market gardener, but it is emphatically the carrot for the farmer, and once used, nothing else will take its place.

Northrup, King & Co.'s Mastodon Carrot is the heaviest cropping carrot grown, yielding more tons to the acre than any other sort. The flesh is white, crisp and solid and very sweet in flavor. It is a vast improvement on the white and green Belgian sorts which have been favorites in the past, as it is not only much more productive but vastly easier to handle. The roots are short and very heavy at the shoulder, rendering them easily harvested. An important feature, also, is that they do not easily break in pulling or sorting. Too much can scarcely be said of their size and great productiveness. The roots frequently measure 15 to 20 inches in circumference, and 18 to 40 tons to the acre is not an extravagant statement as to yield. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00. By express or freight at purchaser's expense, 5 lbs. and up-wards at 80c per lb.



18 bu. Mastodon Carrots Raised from a 10 cent Package of Seed.

18 Bu. for 10 Cents.

I send you a picture showing 18 bushels of your Mastodon Carrots raised from a 10 cent package of seed. Many of the roots weigh over 4 pounds.

F. F. FARRAR, Minn.

Thought You Were Fooling.

I bought some of your Mastodon Carrots last year thinking that you were fooling when you said in your catalogue that they would weigh 5 lbs., but I was surprised to pull one up which weighed 7 lbs. 3 oz.

CARL ANDERSON, Minn.

92 Bushels for 25 Cents.

Last year we raised 92 bushels of Mastodon Carrots from 25 cents worth of seed, which I think was an extra good yield.

L. J. JOHNSON, Wis.

115 Bushels for 35 Cents.

I shall want some more of your Mastodon Carrot seed. I raised 115 bushels from 35 cents worth of seed.

F. C. SQUIRES, N. Y.

2000 Bushels an Acre.

I have found your seeds to be all that you claim. The Mastodon Carrot is an enormous yielder—they will give me 2000 bushels an acre.

AUGUST STOLPER, Wis.

455. Northrup, King & Co.'s VICTORIA CARROT FOR STOCK

Sold only in Sealed Packages.



The Victoria is a very large and a very rich stock carrot. There can be only one best stock carrot, and we think our Mastodon is that carrot, yet there are many who prefer a yellow carrot. We can say to such that there is no yellow carrot which can approach the Victoria in size, in yield and in feeding qualities. It is the largest and best form of Orange or Yellow Carrot known. The roots are remarkably fine, very symmetrical and of excellent quality, possessing high feeding properties. It is a heavy cropper on all soils, but is especially adapted for rich, strong land. It grows nearly half as much weight again an acre as the ordinary varieties, and as the roots grow more above the ground it is much easier to gather the crop. This grand variety is sure to suit every one who grows it. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00. By express or freight at purchaser's expense, 5 lbs. and upwards at 80c per lb.

Book on Carrots and Mangels. By J. H. Gregory. How to raise, store and feed them. Price, 30c, (postpaid, 35c).

Booklet on Root Crops. A small, pocket edition giving in concise form information on Stock Carrots, Mangels, Rutabaga and other roots. Tells how to grow, store and feed them. This booklet will be sent free with orders when requested or will be mailed on receipt of 5c in stamps.

—All vegetable and flower seeds sent prepaid except where noted.

Mastodon Carrot, Reduced in Size.

IMPORTANT.—Owing to the large size which these carrots attain, less seed is required to the acre than of any other sort—2 lbs. an acre being sufficient.



CAULIFLOWER

Culture. For early use, seed should be sown $\frac{3}{4}$ of an inch deep in a greenhouse, hot-bed or in boxes in the house, about 6 weeks before the plants are needed for planting out.

If, when the second leaves appear, the plants can be transplanted, spacing them 3 inches apart, better and more hardy plants will be obtained.

As soon as the soil can be worked in the spring the plants should be removed to the open field and set in rows 2 feet apart each way. Cultivate occasionally to keep out weeds and preserve the moisture in the soil until the plants shade the ground.

For late use sow seed in beds about May 10th and when the plants are large enough remove to the garden, setting them from 2 to 2 $\frac{1}{2}$ feet each way.

Cultivation must begin as soon as the plants are set in the field, and continued as long as it is possible to get through them with a horse cultivator without doing injury to the plants.

As soon as the heads begin to form, tie the leaves together over the head to keep out the light; by this process nice white heads are obtained.

One ounce of seed will produce about 1000 plants.

460. Northrup, King & Co.'s Model

Sold only in Sealed Packages.

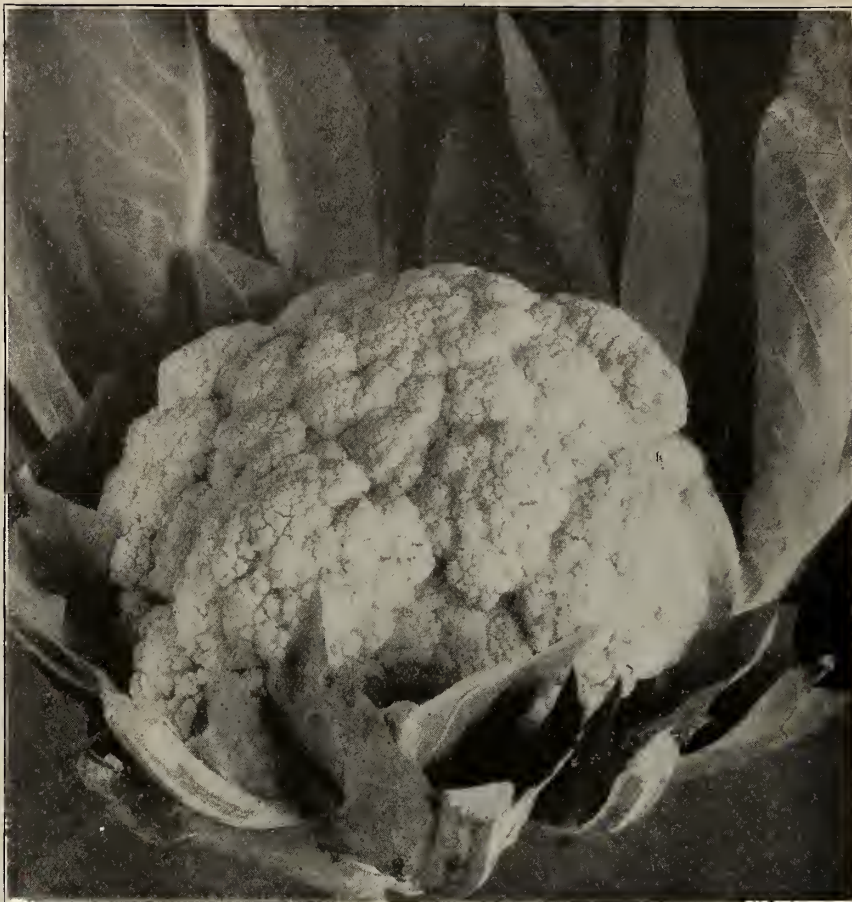


In competition with all other strains the Model Cauliflower has won the approval of critical gardeners, being the earliest and best sort grown. It is suitable not only for early use, but is superior for late planting. The heads are hard and solid and do not spread as do some of the inferior sorts. No other equals it in purity of color, being clear snow white. It is equally desirable for family use and for the market garden. The heads are large—from 9 to 12 inches in diameter, and weigh from 4 to 8 pounds. On account of its close growing, compact habit many more plants may be grown on a given area than of the late spreading sorts. Pkt., 20c; $\frac{1}{4}$ oz., 70c; $\frac{1}{2}$ oz., \$1.25; oz., \$2.25; $\frac{1}{4}$ lb., \$8.00.



465. Northrup, King & Co.'s Drought Resisting.

(Sold only in sealed packages.) Especially adapted to dry locations, where it will produce large, solid heads when all other sorts would fail. To secure the best heads the soil must be rich and thoroughly cultivated. Pkt., 20c; $\frac{1}{4}$ oz., 70c; $\frac{1}{2}$ oz., \$1.25; oz., \$2.25; $\frac{1}{4}$ lb., \$8.00.



Northrup, King & Co.'s Model Cauliflower.

470. Snowball. Forms snow white heads six to ten inches in diameter, of good quality. Its close growing habit permits more heads to a given area than the later maturing sorts. Excellent for both early and late planting. Grown from stock seed obtained from originators. Equal to any strain of 'Snowball' on the market. Pkt., 15c; $\frac{1}{4}$ oz., 65c; $\frac{1}{2}$ oz., \$1.15; oz., \$2.00; $\frac{1}{4}$ lb., \$7.50.

475. Extra Early Dwarf Erfurt. The finest strain dwarf and compact, forming good sized heads, very fine stock. Pkt., 15c; $\frac{1}{2}$ oz., 75c; oz., \$1.25; $\frac{1}{4}$ lb., \$4.00; lb., \$15.00.

480. Early Erfurt. The true "Erfurt" strain, but not quite so early as the Extra Early. Pkt., 10c; oz., 75c; $\frac{1}{4}$ lb., \$2.25; lb., \$7.50.

482. Extra Early Paris. A popular and early heading variety. Heads are solid and very uniform but not considered as sure heading as the Erfurt type. Pkt., 10c; oz., 50c; $\frac{1}{4}$ lb., \$1.50; lb., \$5.00.

Cauliflower Plants. For early and late plants see page 102.

CRESS

Culture. Sow seed thickly in shallow drills 12 inches apart, in the spring, and for a succession every two weeks.

One ounce of seed required for 200 feet of drill.

Water Cress. Sow the seed in cool, moist soil in the early spring or if a shallow slow running stream or ditch is near, the seed may be sown within the same near the bank. When sown in a location of this kind it grows luxuriantly for years.

485. Fine Curled (Pepper Grass.) Quick growing; leaves finely cut like parsley; growth dwarf and compact; crisp and pungent. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 50c.

490. Water Cress. Highly esteemed as a salad; also used as a garnish for meats. Pkt., 10c; oz., 40c; $\frac{1}{4}$ lb., \$1.25; lb., \$4.00.

495. CHIVES

Chives are perfectly hardy perennial plants of the onion type. They are grown for the small leaves which come up very early in the spring and give a mild onion flavor to food in which they are placed. The tops may be cut off close to the ground as desired. Pkt., 10c; $\frac{1}{4}$ oz., 15c; $\frac{1}{2}$ oz., 30c; oz., 50c. For roots see page 102.

CELERIAC

(Turnip Rooted Celery)

Culture. Treat seeds and plants the same as recommended for celery with the exception that it is customary to set the celeriac plants in rows 1 foot apart. The roots are preserved for use in winter by storing in moist sand in the cellar.

One ounce seed for 1,000 plants.

500. Large Erfurt. Large, smooth, excellent flavor. Pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., 90c; lb., \$3.00.



Celeriac or Turnip Rooted Celery.

CELERY

Culture. Sow the seed in a sheltered location in the garden, in a well prepared seed bed, as early in the spring as the soil can be worked. Cover the seed with a very little soil and firm the same well. Keep the seed bed moist to insure quick germination and vigorous growth.

The plants should be ready for planting out the last of June, and previous to that time the top leaves should be sheared off a couple of times, which makes stocky plants with a tendency to spread out.

When ready for the field, set plants 6 to 8 inches apart in rows 3 to 4 feet apart, according to the variety and soil. Care must be taken to firm the soil well around the roots of the plants and if the weather is dry the plants should be set out in the evening and watered and shaded from the sun for a few days. When the roots of the celery plants are very long it is advisable to trim them off just before setting to about 3 inches. This facilitates handling and the plant is likely to be set in the ground in far better shape.

Keep the soil stirred between the rows and around the plants until the middle of August, then, if desired for fall use, work up the soil between the rows and draw it around the plants from time to time until the plants are covered to their very tips and they will be ready for use soon after. Before banking up the soil in this way care should be taken to draw the leaves together, forming a close head.

When desired for winter use it should not be bleached in the field, but enough soil should be drawn about it to secure an erect habit of growth and transferred to the cellar prior to settled cold weather.

One ounce of seed will produce about 3,000 plants.

505. Northrup, King & Co.'s Golden Self



Blanching.

This splendid variety is without doubt the most popular celery grown. It is a self-blanching sort, for with a little banking or covering, even the outer ribs assume a beautiful golden yellow, while the heart or vine stalks are deliciously tender, brittle and sweet. This variety is being very extensively grown both for market and private use, not only on account of its ease of culture, but for its superior quality. It is not quite so early as the White Plume, but is of heavier and more compact growth, the stalks being thick, crisp and brittle. The hearts are large and solid, blanching a beautiful waxen yellow. It is tender and sweet and free from stringiness. Its flavor is rich and delightful.

Our Private Stock seed is procured from a noted celery grower in France. French grown seed is superior to the American stock. It is higher in price, but is well worth the difference. The American grown seed is often as good as any produced in France, but we have sometimes been disappointed in the quality, while the seed produced in France has never failed us. For that reason we have decided to offer in this catalogue both strains.

Our Private Stock seed is sold only in sealed packages. Large pkt., 25c; oz., \$1.50; ¼ lb., \$5.00.

510. Golden Self Blanching, American

Grown. This is the same variety as our Private Stock seed but is American grown. It gives good results as a rule but we do not recommend it so highly as our French grown seed. Pkt., 10c; oz., 60c; ¼ lb., \$1.75; lb., \$6.00.

515. Northrup, King & Co.'s Kalamazoo



(Sold only in sealed packages.) We consider our Kalamazoo absolutely and without exception the very best celery grown. It is late, it is not self blanching, but it is worth many times over, all the extra trouble and labor involved in growing it. Kalamazoo Celery, when properly grown, is extremely large, solid and crisp, and possesses a rich, sweet and "nutty" flavor unequalled by any celery we ever saw anywhere.

Take proper care of it, and you have a celery beyond comparison. It is a fine keeper. Pkt., 10c; oz., 35c; ¼ lb., \$1.00; lb., \$3.50.

520. White Plume.

The earliest celery. This is a well known variety. Popular on account of its earliness and the ease of its culture. Pkt., 10c; oz., 35c; ¼ lb., \$1.00; lb., \$3.50.

530. Golden Hearted

Dwarf. A favorite main crop variety. When blanched the stalks are of a wavy yellow color, solid and crisp. A splendid keeper. Pkt., 5c; oz., 25c; ¼ lb., 75c; lb., \$2.50.

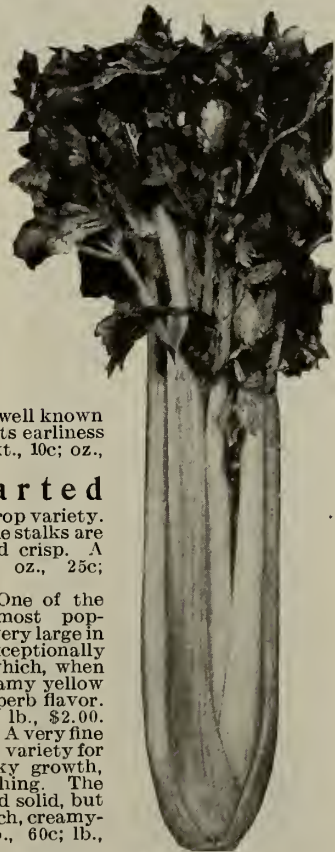
535. Giant Pascal. One of the most popular sorts for winter use. It is very large in growth; the stalks are exceptionally thick with very heavy hearts which, when blanched, are of a beautiful creamy yellow color. Very brittle and of a superb flavor. Pkt., 5c; oz., 20c; ¼ lb., 60c; lb., \$2.00.

537. Winter Queen. A very fine variety for winter storage. Robust, stocky growth, requiring but little labor in blanching. The heart stalks are heavy, broad and solid, but crisp and tender, blanching to a rich, creamy-white. Pkt., 5c; oz., 20c; ¼ lb., 60c; lb., \$2.00.

Celery Plants. Early and late, see page 102. **White Plume Celery.**



Northrup, King & Co.'s Golden Self Blanching Celery.



SWEET CORN

Market gardeners and private planters should keep in mind the important fact that sweet corn produced in the North is earlier and more hardy than the same varieties grown farther south. We do not think it too much to claim that nearly all of our varieties of sweet corn are easily a week to ten days earlier than the same varieties produced elsewhere. This means a great deal to the gardener who wishes to have his corn first in market, for it is then that the best prices are obtained. It is equally as important also to the private planter growing corn for his own table, as it lengthens the season for all varieties.

One lb., of seed will plant about 100 hills; 12 to 15 lbs., an acre in hills. The Minnesota State Law designates 48 lbs. as a bu. of Sweet Corn.

The Two Best Early Varieties of Sweet Corn

545. Golden Bantam.

Should be grown in every garden.

Everyone likes to eat Golden Bantam Corn. In fact many people will not take any other when Golden Bantam is obtainable.

Quality. The flavor is deliciously distinct, superior to that of any other corn. Of all varieties the name "Sugar Corn" seems to fit this best as it is so unusually sweet. The decided preference shown for it in market, restaurant and home has enabled many growers to sell Golden Bantam at a premium. It is so unique in appearance that all who have ever enjoyed the golden yellow ears recognize them instantly. One cannot forget such splendid quality.

Habit of Growth. Another good feature of this corn is the character of its growth. The stalks are usually 4 to 5 feet high, with short foliage. Being small they can stand very close together and thus produce a large crop on a very small area. The ears average more than one to the stalk; they are 6 to 7 inches long, just the right size to serve at the table. The kernels are tender, very wide and of good depth while the cob is small. There are 8 to 12 rows of kernels on each ear. Golden Bantam ears are enclosed in a heavy husk, protecting them against insects and disease.

For the Home Garden. The best way to get good sweet corn is to raise it yourself. Then you can be sure that it is fresh and picked at just the right time. This is of the greatest importance since if it is picked too early it is watery and tasteless, if too late the hulls become tough. However Golden Bantam remains in condition for eating an unusually long time.

No sweet corn is better adapted to the home garden than Golden Bantam since its slender growth requires little space and it matures in such a short season that some other crop can be raised on the same ground either before the latest planting or after removing the earliest.

Earliness. In season Golden Bantam is about six days earlier than Peep o' Day, but on account of the superior quality of the yellow corn many start it indoors in April and transplant it later to the garden. By this method Golden Bantam is ready for use in early summer. It may be sown out-doors from the end of May to July tenth. For succession, plant at ten day intervals, and thus produce the finest sweet corn from early summer until frost.

Hardiness. Especially adapted for Northern planting, on account of its hardiness and ability to withstand unfavorable weather. Not only is it adapted for planting in the extreme North, but is meeting with unusual success in the middle and southern states. It may be planted late in the summer for early fall use. In high altitudes where many other varieties will not mature on account of the cold nights or early frost, this variety proves successful.

Northrup, King & Co.'s Strain. Our Golden Bantam Sweet Corn is all grown in Minnesota under the personal supervision of our experts. Here, in the North, the growing season is short so corn must mature earlier than it does farther south. Consequently Northrup, King & Co.'s Strain of Golden Bantam is the earliest known. It is the best to plant in high altitudes or northern regions—wherever the growing season is short. Earliness counts in the middle states, too, where a few days often makes a big difference in the market gardener's profit, so we confidently recommend our strain for planting there also. We carefully select all ears before shelling and our stocks are the very finest obtainable.

That this strain is popular is proved by the fact that last year we sold enough Golden Bantam to seed 40,000 acres, shipping it to all parts of the country. New England alone took a carload—New England, where most of our sweet corns originated. There if anywhere they know what good sweet corn is and so they come to the Northwest for their seed, convinced that here only can they secure the earliest and best strain.

Price for Golden Bantam Sweet Corn. Pkt., 5c; 1/4 lb., 10c; 1 lb., 15c; 5 lbs., 60c; 10 lbs., \$1.15; 25 lbs., \$2.50; 50 lbs., \$4.75; 100 lbs., \$9.00.

Facts About Both Varieties.

Satisfaction. We have yet to hear of a grower who has planted our Peep o' Day or Golden Bantam Sweet Corns and was not well pleased with them when weather and climate were favorable. From all points come letters from pleased customers.

Culture. The stalks, being short and small and having few leaves, may stand very close together. The seed may be planted either in hills or in rows. If the former, plant six or seven kernels in a hill, thinning out well so as to have four plants in each hill. If in rows and not in hills, drop the seed from six to eight inches apart, according to the soil, and if planted early cover about one inch deep. Seed planted later should be planted deeper, according to the amount of moisture in the soil. The rows may be just far enough apart to admit of cultivation. Twelve to fifteen lbs., of seed will plant an acre. Prepare the land thoroughly, making it deep and mellow. For early corn, plant just as soon as danger of frost is over, bearing in mind that it is sometimes well to take a risk in early planting as early corn is always in greatest demand.

It should be borne in mind that Minnesota grown sweet corn is at least two weeks earlier and much harder than seed produced in any other section.

Order Early. It will be a great convenience both to our customers and to ourselves if all orders are sent to us early. This will insure their being filled immediately from the choice of our stocks.

Note—For succession, plant Peep o' Day for earliest; Golden Bantam for second early; Portland for medium; Northrup, King & Co.'s Zig Zag Evergreen or Improved Black Mexican for late, and secure the very best sweet corn in each class.

To have the finest sweet corn it must be picked in just the right condition, that is, when the skin of the grain breaks at the slightest puncture. It will be of inferior quality if it is either a few days too old or too young.

Our Sweet Corn is Thoroughly Tested before it leaves our hands.

Prices. At the following prices on corn—packets and quarter pounds are sent prepaid, all larger quantities are shipped at purchaser's expense; if wanted by parcel post add postage at rates on page one.

540. Northrup, King & Co.'s Peep o' Day.

(Sold only in sealed packages.)

In our Peep o' Day Sweet Corn we offer a variety which we believe to be a week to ten days earlier than any other sweet corn grown. There is no product of the garden which is so eagerly awaited as the first sweet corn of the season. Not the tasteless, discouraged, premature corn shipped from long distances, of little value when picked and unfit for human food when it arrives, but the real, tender, juicy sweet corn, ready for use before the summer has really commenced. Such a sweet corn is Northrup, King & Co.'s Peep o' Day. Not only is it early, but it is sweet and delicate in flavor, being excelled in this respect by no other early sweet corn except Golden Bantam. Kernels are pure pearly white.

On account of its extreme earliness Peep o' Day sweet corn is especially adapted for planting in northern latitudes and in high altitudes where other varieties fail entirely. Peep o' Day produces a large number of "suckers" which, unlike other varieties, produce full sized, well formed ears. It is not unusual to find a single plant bearing from four to five ears. The yield per acre is therefore very large.

The stalks grow 3 1/2 to 4 1/2 feet in height, and having light foliage may stand very close together. The ears are small, 5 to 6 inches in length. The kernels, though not large are of good substance and borne 8 to 12 rows to the ear.

Prices of Northrup, King & Co.'s Peep o' Day Sweet Corn. Pkt., 5c; 1/4 lb., 10c; 1 lb., 15c; 5 lbs., 60c; 10 lbs., \$1.00; 25 lbs., \$2.25; 50 lbs., \$4.25; 100 lbs., \$8.00.

Boys, here is your chance to make money! Obtain the use of an acre or half acre of ground or vacant lot and convert it into a sweet corn farm. It will surprise you to find how many people in your neighborhood are really hungry for good sweet corn, and how gladly they will purchase it from you.



Golden Bantam Sweet Corn.



Northrup, King & Co.'s Peep o' Day Sweet Corn.

SWEET CORN

At the following prices on sweet corn, packets and quarter lb. lots are sent prepaid, all larger quantities at purchaser's expense; if wanted by parcel post add postage at rates on page one.

Culture. Sow upon arrival of warm weather in drills 2 inches deep, 3 to 4 feet apart, according to variety, placing the seeds 8 inches apart in drills or 6 seeds in hills 3 to 4 feet apart each way. Cultivate to keep free from weeds and when corn is well started thin to 4 stalks to the hill.

Plant early varieties in succession, or sow early, second early and late sorts at one time, which will continue the season for several weeks. One bushel of seed will plant from $3\frac{1}{2}$ to 4 acres.

The Minnesota State Law designates 48 lbs. as a bushel of Sweet Corn.

EXTRA EARLY VARIETIES

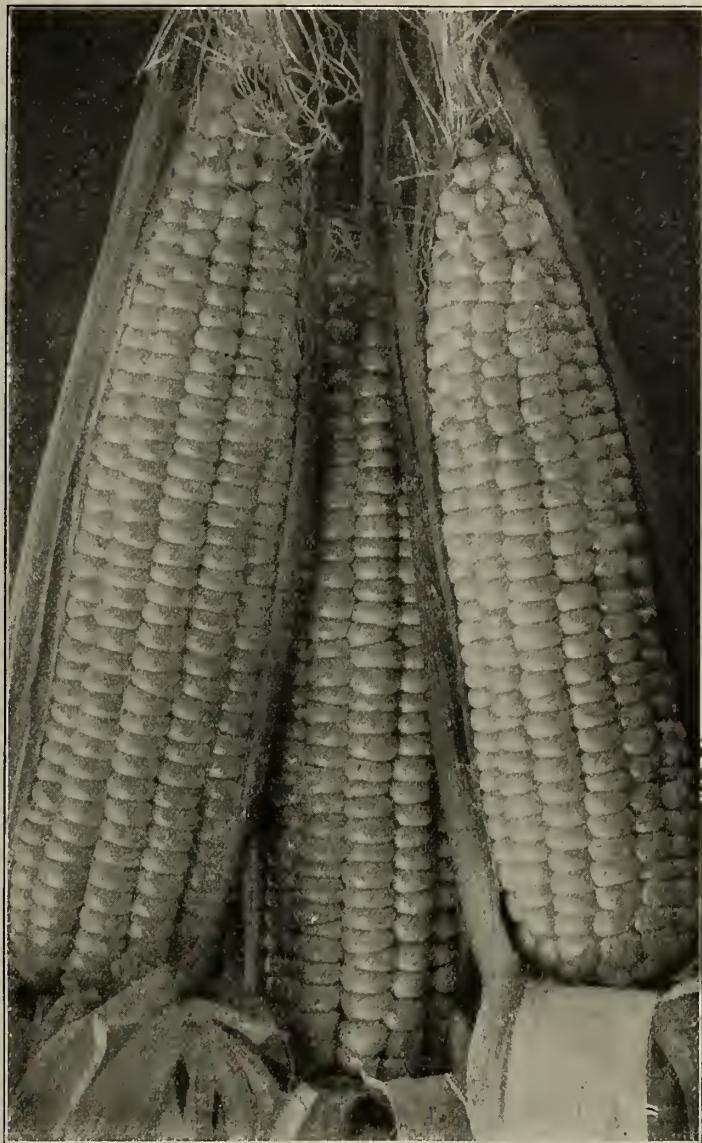
550. Early Minnesota. A standard early sort of excellent quality, especially desirable where seasons are short. The ears bear 8 to 10 rows of large, white grains. This variety is popular on account of its great productiveness. Excellent for market, home and canning use. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 15c; 5 lbs., 60c; 10 lbs., \$1.00; 25 lbs., \$2.25; 50 lbs., \$4.25; 100 lbs., \$8.00.

555. Early Red Cory. Equally as early as White Cory. Corn is white but the cobs are red. Very sweet and tender. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 15c; 5 lbs., 60c; 10 lbs., \$1.00; 25 lbs., \$2.25; 50 lbs., \$4.25; 100 lbs., \$8.00.

560. Extra Early White Cory. One of the earliest varieties, well and favorably known in all parts of the country. It succeeds well where the seasons are short, and can be recommended for general planting. Ears six inches long, with eight rows of broad grains. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 15c; 5 lbs., 60c; 10 lbs., \$1.00; 25 lbs., \$2.25; 50 lbs., \$4.25; 100 lbs., \$8.00.

562. Extra Early White Mexican. As sweet and delicious as Black Mexican and as early as White Cory. Stalks $4\frac{1}{2}$ ft. high. Ears eight inches long, usually eight rowed. Superior in quality to any early variety of equal size. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 15c; 5 lbs., 60c; 10 lbs., \$1.15; 25 lbs., \$2.50; 50 lbs., \$4.75; 100 lbs., \$9.00.

564. Howling Mob. This variety originated at Toledo, Ohio, and its queer but appropriate name has reference to the loud and clamorous demand for the corn when brought to market. The stalks are usually about 5 feet in height and produce early in the season two splendid ears to a stalk. The ears are 7 to 9 inches in length and are well covered with a heavy husk, affording protection from the green-worms which so often are destructive to early varieties. There are 12 to 24 rows of good sized white kernels. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 20c; 5 lbs., 85c; 10 lbs., \$1.50; 25 lbs., \$2.75; 50 lbs., \$5.25; 100 lbs., \$10.00.



Northrup, King & Co.'s Portland Sweet Corn.

575. Mammoth White Cory. Similar to Early Cory, quite as early. The kernels, however, are somewhat broader and the ears average somewhat larger in size. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 15c; 5 lbs., 60c; 10 lbs., \$1.00; 25 lbs., \$2.25; 50 lbs., \$4.25; 100 lbs., \$8.00.

578. Pocahontas. An exceptionally early variety. The growth is very uniform and the ears are evenly and compactly filled with broad, white kernels which are tender, sweet and of very fine quality for so early a variety. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 20c; 5 lbs., 85c; 10 lbs., \$1.50; 25 lbs., \$2.75; 50 lbs., \$5.25; 100 lbs., \$10.00.

SECOND EARLY VARIETIES



585. Northrup, King & Co.'s Portland.

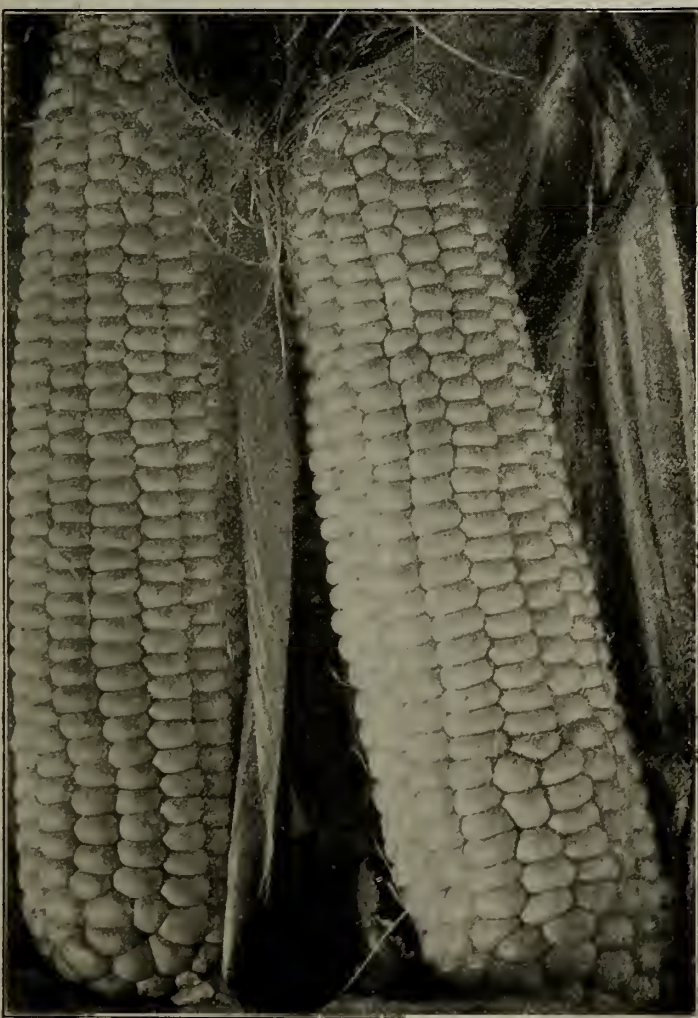
(Sold only in sealed bags.) This variety is not quite so early as the Cory, but it will pay sweet corn growers to wait a few days for it. Private families pronounce it unsurpassed; market gardeners capture trade with it. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 15c; 5 lbs., 60c; 10 lbs., \$1.15; 25 lbs., \$2.50; 50 lbs., \$4.75; 100 lbs., \$9.00.

590. Early Crosby. A standard sort deservedly prized by thousands of planters as one of the sweetest of varieties. The kernels are very closely set. This strain is superior to any variety of sweet corn grown for canning purposes in the state of Minnesota. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 15c; 5 lbs., 60c; 10 lbs., \$1.00; 25 lbs., \$2.25; 50 lbs., \$4.25; 100 lbs., \$8.00.

592. Early Evergreen. This fine variety is ten to twelve days earlier than Stowell's Evergreen and yields large, handsome, ten or twelve-rowed ears. An excellent variety to follow Mammoth White Cory. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 15c; 5 lbs., 60c; 10 lbs., \$1.15; 25 lbs., \$2.50; 50 lbs., \$4.75; 100 lbs., \$9.00.

595. Perry's Hybrid. A well known and favorite sort, valued on account of its hardness, productiveness and size of ears. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 15c; 5 lbs., 60c; 10 lbs., \$1.00; 25 lbs., \$2.25; 50 lbs., \$4.25; 100 lbs., \$8.00.

600. White Evergreen. This variety is a little earlier than Stowell's and is pure white in color. The stalks are of strong, vigorous growth from six to seven feet high. The ears are very large and well filled to the tip with long, slender, pure white grains of the finest flavor. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 15c; 5 lbs., 60c; 10 lbs., \$1.15; 25 lbs., \$2.50; 50 lbs., \$4.75; 100 lbs., \$9.00.



Early Minnesota Sweet Corn.

SWEET CORN



Stowell's Evergreen Sweet Corn.

LATE VARIETIES

605. Northrup, King & Co.'s Zig Zag



Evergreen. (Sold only in sealed bags.) The very best of all late white varieties. We have statements from experiment stations and from canning factories, as well as from hundreds of private planters, testifying to its superior sweetness and productiveness, incomparable whiteness when cooked and fine appearance on the table. As introducers of this variety, we assert without fear of contradiction that it is best of all the late white sorts. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 15c; 5 lbs., 60c; 10 lbs., \$1.00; 25 lbs., \$2.25; 50 lbs., \$4.25; 100 lbs., \$8.00.

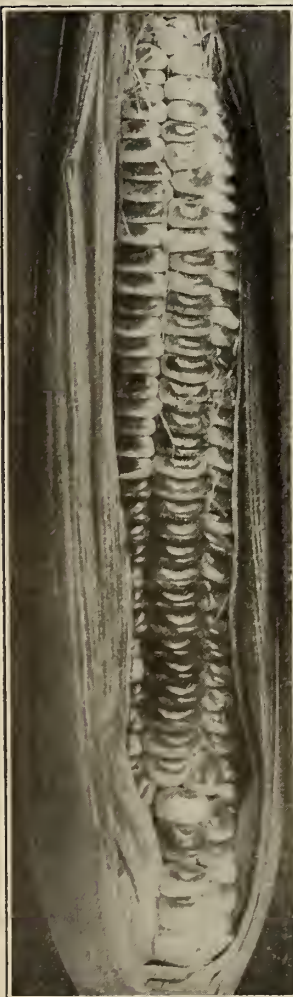
610. Stowell's Evergreen. The best known and most largely planted of all the varieties. We are free to confess that Northrup, King & Co.'s Zig Zag Evergreen possesses all of the good qualities which have made the Stowell's strain so popular. At the same time, the Stowell's Evergreen is hard to beat and for a long time to come many will have it in preference to any other sort. This corn is distinguished by the large ear, the long, deep kernels, its rich, sugary flavor and its long keeping qualities. Our seed has been selected for its sweetness, productiveness and large size. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 15c; 5 lbs., 60c; 10 lbs., \$1.15; 25 lbs., \$2.50; 50 lbs., \$4.75; 100 lbs., \$9.00.

615. Country Gentleman. This variety is often called the "shoe peg" corn, owing to the arrangement of the crowded kernels which are long and very sweet. Our seed of this variety has been carefully selected and is true to name. It is nearly as sweet as Peep o' Day and is far ahead in flavor of any of the late varieties. It remains tender and fit for use longer than most sorts, as the ear is enclosed in a thick husk which keeps it "in the milk." The ears average nine inches in length and are borne from two to five and sometimes six on each stalk. The cob is small and very closely packed from tip to butt with slender, pure white kernels of the finest quality. If you try this variety you will like it. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 20c; 5 lbs., 85c; 10 lbs., \$1.50; 25 lbs., \$2.75; 50 lbs., \$5.25; 100 lbs., \$10.00.

620. Improved Black Mexican. This variety has for a number of years had the reputation of being the sweetest of all sweet corn. When cooked, the ear is white with a bluish tinge towards the base of the kernel. Every year we have a number of inquiries from those who have known this corn, but who have forgotten its name and remember it only as the "black corn that was so very sweet." We offer a highly superior strain of this very desirable and much sought after sort. It must still rank with us as a late variety, but as it now matures nicely in Minnesota, it may be safely grown in almost any part of the United States. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 15c; 5 lbs., 60c; 10 lbs., \$1.00; 25 lbs., \$2.25; 50 lbs., \$4.25; 100 lbs., \$8.00.

622. Late Mammoth. A rather late variety on account of its immense size, producing the largest ears of any variety. These measure up to 14 inches in length and are well filled with large, broad, white kernels which are sweet, tender and delicious. Usually there are 16 to 18 rows to the ear. The stalks are very large, about eight feet high and productive. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 15c; 5 lbs., 60c; 10 lbs., \$1.15; 25 lbs., \$2.50; 50 lbs., \$4.75; 100 lbs., \$9.00.

Please note prices on sweet corn are prepaid only on packets and quarter pound lots. Postage rates given on page one.

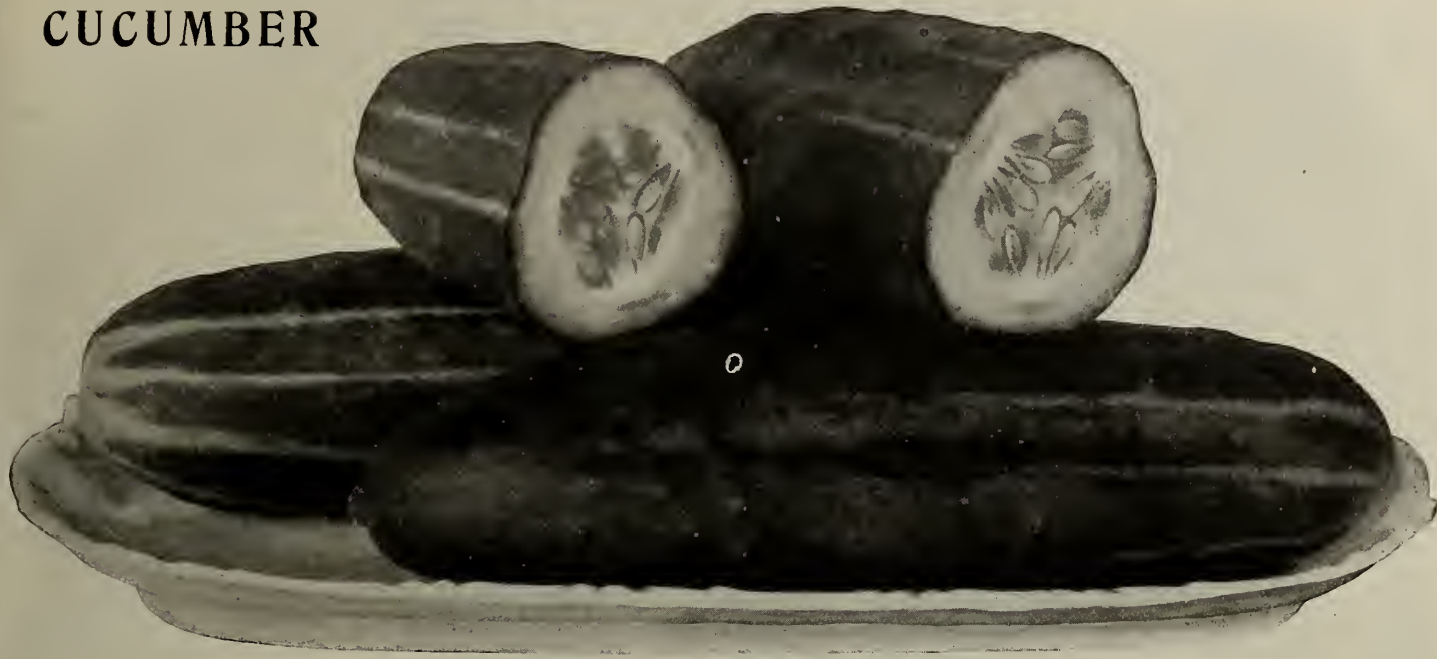


Black Mexican Sweet Corn.



Country Gentleman Sweet Corn.

CUCUMBER



Northrup, King & Co.'s Sterling Cucumber.

Culture. Plant the seed $\frac{3}{4}$ of an inch deep in hills 4 to 6 feet apart each way, according to the variety, about corn planting time, allowing 10 seeds to the hill. As soon as the plants commence to run, remove all but 3 or 4 of the most promising ones in each hill. Cultivate frequently as long as the vines will permit. The seed may also be started in old berry boxes by placing them in the hot-bed. When the weather is suitable—settled and warm—remove the box as the plants are placed in the garden. The fruit should be gathered as soon as large enough for use, if it is not, the productiveness of the vines will be permanently injured. One ounce required for 60 hills; two to three pounds per acre.

625. Northrup, King & Co.'s Sterling.

Sold only in Sealed Packages.

Will be found to possess the following points of superiority:

First. It is the earliest white spine cucumber, suitable for table, market or shipping purposes, under all conditions of culture, whether under glass or in the open ground.

Second. It is one of the greatest producers of all varieties; and at all stages of growth is the handsomest and most attractive of all American sorts.

Third. It is of a very deep green color, which it retains during a much longer period of growth than any other variety, while in symmetry of form it is so regular, so uniformly one like the other as to create comment wherever it is seen.

Fourth. The quality is superb, being exceedingly brittle and crisp. The flavor is delicate and entirely devoid of the bitter taste so frequently noticed in other varieties.

Fifth. As a shipping cucumber, the "Sterling" cannot be surpassed, as it holds up in color and quality better than any other variety.

Price, pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$1.75.

635. Ak=sar=ben. One of the finest strains of white spine cucumbers; vigorous and prolific. Fruit is uniform in size, averaging eight to ten inches long, dark green in color and handsome in appearance. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.50.

640. Boston Pickling. Very productive, grown largely for pickles. Fruit medium sized, very smooth, bright green. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

645. Chicago or Westerfield Pickling. Fine for market gardeners. Medium length, pointed at each end; has large spines, deep green, very prolific. Good for pickling. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 45c; lb., \$1.35.

650. Cool and Crisp. A strain of white spine similar to the Arlington but larger. Fruit long, cylindrical, dark green. Fine for table use. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

655. Davis Perfect. A carefully selected strain of Extra Long White Spine, suitable for both greenhouse and outdoor culture. The fruits are of large size, splendid quality and fine color. The flesh is tender, brittle and of excellent flavor. A favorite for market use. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.50.

For illustration see following page.

660. Early Frame or Short Green. Used for table and pickling. Very productive. Fruit straight, bright green. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.



Early Green Cluster Cucumber.

665. Early Green Cluster. Fruit small, grows in clusters of two or three, very prolific, short, dark-green. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.



Northrup, King & Co.'s Extra Long White Spine Cucumbers.



Boston Pickling Cucumber.

**630. Northrup, King & Co.'s Extra Long White Spine.**

(Sold only in sealed packages.) An extra fine variety for either greenhouse or open ground. It grows to a large size in a very short time and commands fancy prices on account of its fine form and appearance. The above illustration is an interior view of a greenhouse in which this variety is grown during the fall and winter, with the most satisfactory results. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$1.75.

CUCUMBER

668. Green Prolific. Very productive, planted both for slicing and pickling. Four or five inches long when large enough to slice. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

670. Improved Arlington White Spine. The fruit is uniform in size and shape averaging 7 to 8 inches long. Color dark green, quality excellent and contains but few seeds. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

675. Japanese Climbing. A vigorous grower, can be trained on a trellis. Fruit from 12 to 16 inches long, dark green and smooth. Flesh pure white, crisp and tender. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

680. Klondike. One of the best varieties for slicing. It will produce handsome, very dark green fruits slightly striped at the ends, equal in appearance to hot-house specimens. A white spined cucumber of medium early maturity, fruits averaging about eight inches in length and two inches in diameter, uniform in size and shape.

The vines are very hardy and productive and continue long in bearing. Market gardeners find this variety especially desirable because it retains its dark green color much longer and is less affected by the hot sun than most other sorts. Much used as a shipping cucumber, but is also adapted for the home garden. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.50.

685. Long Green. Produces dark-green fruit from 10 to 14 inches long. Flesh solid, crisp and of fine quality. Fine for slicing and pickling. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 45c; lb., \$1.35.

690. Northrup, King & Co.'s

Pickling. (Sold only in sealed packages.) It would be difficult to "make to order" a better pickling cucumber than this. Fruit is medium length, pointed at each end; color deep green. It is very productive. Flesh, crisp and tender, and covered with spines. The best sort for those who like a crisp, tender pickle. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.50.

695. Northrup, King & Co.'s

Siberian. (Sold only in sealed packages.) The earliest. Fruits are small, being about 3 inches in length and $1\frac{1}{2}$ inches in diameter. Plants productive and fruits of excellent quality. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

Best I Ever Saw.

I think your Siberian Cucumber is the best I ever saw in this locality. IRA WARD, Wash.

Booklet on Vine Crops. In addition to other fruits of the vine this booklet gives information on planting, cultivation and harvesting cucumbers, also varieties best adapted for various uses. Sent free with orders when requested or mailed for 5c in stamps.

Book on Vegetable Gardening. By S. B. Green. A manual on the growing of vegetables for home and market. 265 pages. Price, cloth; \$1.00; paper covers, 50c, postpaid.

700. White Spine, Evergreen. Northrup, King & Co.'s Special Strain. A fine strain, bearing blue green fruit, often from 10 to 12 inches in length, smooth, round and of fine quality. Especially recommended for hot-bed culture. The seed we offer has been taken from fruit selected for its ideal form, uniformity in size, shape and color and general appearance. A very satisfactory variety in every way. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 45c; lb., \$1.35.

Go Like Hot Cakes.

I planted one acre of Sterling Cucumbers. They go like hot cakes on the market on account of the nice shape and color. They yield well also.

ALBERT WEHREN, Wis.

White Spine, Evergreen Cucumber, Northrup, King & Co.'s Special Strain.

705. White Spine, Improved. Large handsome, uniform fruits. Crisp and fine flavor Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.15.

710. White Spine, Peerless.

Larger than the Improved, but not quite so early Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.15.



Northrup, King & Co.'s
Improved New York Spineless
Egg Plant.

GOURDS. Desirable where an immense amount of vine is wanted quickly. Fruit is unique, ornamental and often useful.

- | | | |
|-----------------------|--------------------------------------|------------|
| 726. Apple. | Apple shaped. | Pkt., 10c. |
| 727. Calabash. | For pipes. | " 10c. |
| 728. Dipper. | Very useful. | " 10c. |
| 729. Hercules Club. | 4 feet long. | " 10c. |
| 730. Nest Egg. | Whitelike an egg. | " 10c. |
| 731. Orange Shaped. | Round, yel. | " 10c. |
| 732. Pear Shaped. | Striped. | " 10c. |
| 733. Sugar Trough. | Very large. | " 10c. |
| 735. Mixed. | All varieties except Calabash. | " 10c. |
| 736. Small Varieties. | Mixed. | " 10c. |
| 737. Large Varieties. | Mixed. | " 10c. |
| 738. Collection. | 1 pkt., each of 8 varieties for 65c. | |

739. GARLIC. Has a bulbous root, with a strong penetrating odor and flavor. Belongs to the onion family and cultivated in much the same manner. Well esteemed by some for flavoring soups, stews, etc. We cannot offer seed but can supply the bulbs or sets. Prepare the ground as for onions, set the bulbs in drills eight inches apart and four inches apart in rows, covering two inches deep. When the leaves turn yellow, pull up the bulbs and dry in the shade. Prices of well cured bulbs: by express or freight at purchaser's expense, lb., 25c; 5 lbs. or more at 20c per lb. If wanted by parcel post add 10c per lb. to cover extra cost.

KALE or BORECOLE. Culture. More hardy than cabbage and makes excellent greens. Improved by a touch of frost. Sow in May and June, cultivate same as cabbage.

740. Dwarf German. (Dwarf Curled Scotch Kale.) This is more hardy than cabbage and makes excellent greens for winter and spring use. The leaves are curly, bright green, very tender and delicate in flavor. Sow seed in May or June, transplant in July and cultivate same as cabbage. For early spring use sow in September; protect over winter with a covering of straw or litter. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

742. Tall Green Curled Scotch. Grows up to three feet high, bearing long, light green leaves, finely curled at the edges. Extremely hardy, being improved, rather than injured by a moderately heavy frost. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 85c.

KOHL RABI. Culture. Sow the seed in the spring in drills ¼ of an inch deep and 2 feet apart and when the plants are a few inches high thin to 15 inches. Cultivate same as for beets. Two pounds of seed required per acre.

745. Early White Vienna. For Forcing. Very early, small, handsome, white bulb. Best early variety for the table. Pkt., 5c; oz., 20c; ¼ lb., 60c; lb., \$2.00.

LEEK. Culture. Sow seed in early spring in rows 1 foot apart and 1 inch deep. When 6 inches high, transplant 4 to 6 inches apart in rows 12 inches apart, setting the plants in the ground up to their center leaves and as they grow draw the soil up around them. This process tends to bleach the leek and to make more palatable the edible portion. Seed required per acre, 4 lbs.; 1 oz. for 100 feet of drill.

750. Large American Flag. or "Broad London". A large growing variety. Pkt., 5c; oz., 15c; ¼ lb., 50c; lb., \$1.50.

MUSTARD. Culture. When used for salads, sow thickly in shallow drills, 6 inches apart. Successive sowings may be made every week or two. When grown to produce seed for use in pickles, pepper sauce, etc., sow early in rows a foot apart and 3 inches apart in the row.

755. Southern Giant Curled. Used largely for salad, especially in the South. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 65c.

OKRA or GUMBO. Culture. Sow the seed thickly in rich ground as soon as the ground has become warm, in drills 3 feet apart and one inch deep. Thin out to ten inches apart and cultivate freely.



Grown from Lambert's Pure Culture Mushroom Spawn.

EGG PLANT. Culture. Egg Plant seed should be sown in hot-beds in March or April and transferred to pots or boxes when an inch or two high and planted out early in June in rows 2½ feet apart each way, cultivation same as for cabbage. One-fourth pound seed will provide plants for one acre. For plants see page 102.



715. Northrup, King & Co.'s Improved New York Spineless.

Sold only in Sealed Packages.

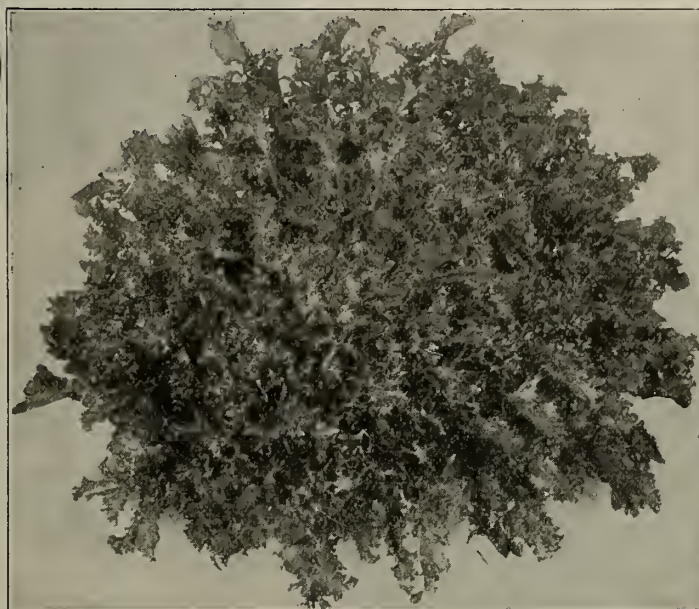
The handsomest type and most perfect strain of Egg Plant in existence. The plants are stocky and low branching, stalks entirely free from spines, and produce continually handsome, deep purple fruits of largest size and most perfect symmetry. The plants usually bear eight to ten immense fruits of the finest quality before being killed by frosts. Large pkt., 10c; oz., 40c; ¼ lb., \$1.25; lb., \$4.00, postpaid.

716. Black Beauty. A little earlier than our Improved New York Spineless but usually not quite so large. The skin is a rich, lustrous dark purple. Very desirable for the market as the fruit holds its rich coloring a long time. Pkt., 10c; oz., 50c; ¼ lb., \$1.50; lb., \$5.00.

ENDIVE. This plant furnishes an attractive and appetizing salad for the fall and winter months, or by repeated sowings a supply may be had nearly all the year round. Useful in flavoring soups, stews, etc. Makes delicious greens if cooked like spinach.

Cultivation same as for lettuce. The bleaching of Endive is brought about by drawing the leaves together into a head and tying them and this should be done a month before it is wanted for table use.

One ounce of seed required for 100 feet of row.



White Curled Endive.

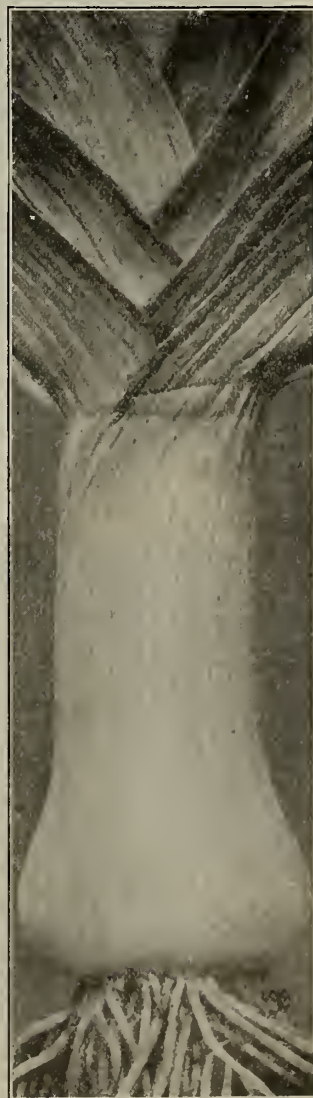
718. Broad Leaved Bata-

vian. Leaves are broad, thick, green, more or less twisted and waved with white mid-ribs. It forms large hearts, which when blanched, form one of the best winter salads. Crisp, tender and fine flavor. Pkt., 5c; oz., 20c; ¼ lb., 60c; lb., \$2.00.

720. Green Curled. Leaves finely cut. Pkt., 5c; oz., 15c; ¼ lb., 45c; lb., \$1.50.

725. White Curled. Very beautiful, leaves need no blanching. Pkt., 5c; oz., 20c; ¼ lb., 55c; lb., \$1.75.

All vegetable seeds prepaid except where noted.



Leek.

760. Mammoth Long Podded.

Exceedingly productive and bears splendid dark green pods from eight to nine inches long. It does not grow hard. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

MUSHROOMS. Lambert's Pure Culture Spawn.

Lambert's Pure Culture Spawn is far superior to the old style varieties and much better results can be obtained from its use. With every order of mushroom spawn we send free of charge complete instructions for mushroom culture. Bricks weigh from 18 to 24 ounces. A brick will spawn ten square feet of bed. With Lambert's Pure Culture Spawn it is impossible to raise poisonous mushrooms. Price, per brick, 35c, postpaid. By express or freight, 10 bricks, \$2.00; 25 bricks, \$4.50; 100 bricks, \$15.00.

LETTUCE

Culture. Lettuce seed should be sown very early in the spring and at intervals of 15 days for a succession; sow the seed in shallow drills—being careful to firm the soil well over the seed and thin to 4 inches apart in row. Two ounces of seed will sow 150 feet of rows, 4 to 5 lbs. seed required per acre. Lettuce also does well in greenhouses or hot-beds in the winter and when grown there, gives entire satisfaction.

HEADING VARIETIES.



765. Northrup, King & Co.'s "Sterling."

Sold only in Sealed Packages.

This grand lettuce delights all who grow it. It is equally suited for the market gardener and the private planter. The market gardener will find that this lettuce will command a premium over other sorts on account of its appearance and quality, while for private gardens no other lettuce approaches it for table use. For salads it is unequalled.

Our Sterling Lettuce comes under the "crisp heading" class. The plants attain quite a large size, but are never coarse. The outer leaves are of a beautiful green, changing toward the center of the head to a rich golden yellow. In flavor it is extraordinarily sweet and crisp, and is of such beautiful appearance and superior quality as to cause universal remark. We never give the name "Sterling" to a variety that is not the very best of its class, and purchasers may rely on finding this lettuce the best they ever put on the table. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 55c; lb., \$1.75.



Northrup, King & Co.'s Sterling Lettuce.



770. Northrup, King & Co.'s Market Gardeners.

(Sold only in sealed packages.) This is one of the very best of the "butter" head lettuces. It is a very great favorite with market gardeners and holds the lead in point of popularity. Large pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 45c; lb., \$1.50.

785. Big Boston. A large heading, forcing sort, very hardy and vigorous, with broad, comparatively smooth, thin and very hard, bright green leaves. Quite tender. Indoors this forms a solid head, while outside it is less distinctively a heading sort. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 45c; lb., \$1.50.

787. Black Seeded All Seasons. This variety is of very attractive appearance, having large, pale green leaves and a large, round head of splendid quality. Very crisp and tender, having that "buttery" quality so much liked. It resists heat exceptionally well, and as its name implies may be grown in the open from early until late in the season. Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 75c; lb., \$2.50.



Black Seeded Tennis Ball Lettuce.

780. Black Seeded Tennis Ball. One of the best for forcing or early outdoor planting. Plants medium size, having thick, dark green leaves. When grown, forms solid heads which are crisp and tender. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.



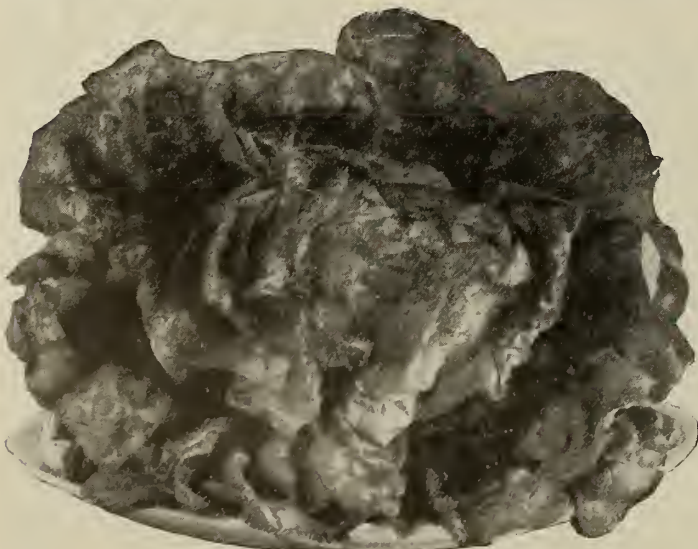
Crisp as Ice Lettuce.

795. Crisp as Ice. The heads are large and very solid. When cut open they have a rich, creamy heart and are so tender and brittle as to warrant the name, "Crisp as Ice." Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 90c.

800. Deacon. OR SAN FRANCISCO MARKET. While this sort does not grow so large as some sorts, it has few outside leaves, grows very solid, and has that delicious, buttery flavor so much sought for and esteemed. The center of the head blanches to a bright yellow shade and is very crisp and tender, remaining so for a long time, even in hot weather. One of the finest sure-heading summer sorts. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

810. Golden Queen. An early sort. One of the best for outdoor planting, as well as growing under glass. The color is a beautiful golden yellow. The heads are so solid, that there is no waste. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 45c; lb., \$1.50, postpaid.

820. Iceberg. Has an unusually solid head. The white, main ribs of the leaves curve toward the center, which keep the interior thoroughly bleached. It is quick growing and always crisp and tender whether propagated in early spring or in the hot days of summer. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.



May King Lettuce.

790. California Cream Butter. Forms round, crisp, solid heads, of buttery flavor, medium early. One of the best summer varieties of head lettuce. Large pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

LETTUCE

HEADING VARIETIES.

825. Improved Hanson Head. The Hanson is one of the most valuable of the crisp heading sorts, in all respects one of the very best out-door varieties for both the professional and amateur gardener. This variety is very hardy and will stand extremes of weather better, perhaps, than any other of the "crisp heading" sorts.

In color it is of an attractive green. The head which attains a large size, is hard, tender and crisp, with a blanched appearance in the center. The table quality is excellent, wholly free from bitterness and remains in splendid condition for use long after it has reached maturity. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

830. May King. An unequalled variety for early spring planting in the open ground, exceptionally early, attaining a size suitable for use before other sorts. Also good for forcing. It is extremely hardy and very quick growing. The plants grow six to seven inches in diameter, with the outer leaves folded closely, forming the plant into a solid head. The outer leaves are light green, slightly tinged with brown; the inner leaves are bright yellow and of a fine, rich, buttery flavor. Each head will weigh nearly a pound on the average. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

837. Tenderheart. A large, new early head lettuce. Plants are uniform, and nearly all head with but few outside leaves. Very attractive and appetizing as well as being very tender, crisp, succulent and sweet. Tenderheart is very hardy and will withstand the early summer heat splendidly. Will remain in head without running to seed, for two weeks after it is fully headed up. The color of the outside leaves is pale green with a slight reddish brown tinge. Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 75c; lb., \$2.50.

Prizehead Lettuce.

835. Prizehead. A large loose headed, thin leaved sort. The very large leaves are crimped, bright green, tinged on the edges with reddish brown and are crisp and sweet. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

838. Wayahead. A very early, firm heading sort, of fine appearance and quality. The heads are larger and tighter than other earlies. Outer leaves light green, under leaves are blanched to a buttery yellow tint. Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 75c; lb., \$2.50.

839. New York or Wonderful. Produces immense heads, solid as a cabbage. The heart blanches beautifully being crisp, tender and delicious. A robust variety, it roots deeply thus is able to resist hot, dry weather. Outer color is a distinct apple-green. Extensively grown all over the country, it is especially popular in California where it is known as Los Angeles Lettuce. A desirable standard summer lettuce. Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 75c; lb., \$2.50.

845. Salamander. A very bright green and attractive variety. It forms large, solid heads of thick, smooth, very tender leaves of the finest quality. The leaves are broad, thick, somewhat crumpled and closely overlapping so that the inner ones are very finely blanched. It withstands hot weather remarkably well and can be planted any time during the summer. One of the best head lettuces to grow out-doors. Also remains long in head before going to seed. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25, postpaid.

846. Mammoth Black Seeded Butter. An enormous compact, cabbage-like, head lettuce, which is tender, crisp and sweet. The leaves are thick, yellowish-green and the inner ones are beautifully blanched. It is a good sort for all seasons. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.50.

Fertilizers for Lettuce.

To grow the best tender lettuce it is advisable to have a very rich, friable soil. The quality of this vegetable is largely dependant upon the rapidity with which it is grown, therefore liberal manuring and thorough preparation are profitable. We recommend for this purpose, Northrup, King & Co.'s Sterling Garden and Lawn Fertilizer and Sheep Manure, listed on pages 154 and 155.

LOOSE LEAVED VARIETIES.

815. Grand Rapids. The most popular variety for greenhouse planting. It will make a quick growth even under adverse conditions. It is of handsome appearance, a strong grower and not subject to rot. When exposed for sale it keeps from wilting longer than other varieties. Its upright habit of growth permits close planting. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 45c; lb., \$1.50.

775. Black Seeded Simpson. One of the best, either for forcing under glass or for open ground culture. It forms large, thin, loose leaves of light green color, very tender, crisp and of fine quality. A fine sort for summer, as it withstands the heat; also for the home garden. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 90c.

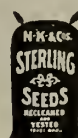
805. Early Curled Simpson. A popular sort, free from bitterness; forms large, loose heads. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

ROMAINE, COS OR CELERY LETTUCE.

817. Paris White Cos. A very distinct variety of lettuce, having large, elongated, compact heads, that blanch mild and crisp. The plants are of erect growth, forming a tall, slightly oblong bunch, of large, crisp leaves. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 45c; lb., \$1.50.

Market Gardeners. We number among our customers many market gardeners and other users of large quantities of seeds. All desiring to purchase greater amounts than those quoted in our catalogue will find it to their advantage to send us a complete, itemized list of their requirements and we will be pleased to name a special net price on the order.

What Our Trade Mark Means.



Our Sterling Bag Trade Mark is used to brand only those varieties of seeds which we can especially recommend to our customers. A variety so marked will be found the best of its kind in every instance. We use this method to designate our specialties. Northrup, King & Co.'s Sterling Brand Seeds have proved by careful test superior in purity, germination, productiveness and hardness. They comply in every respect with the pure seed laws of all states.

Grand Rapids Lettuce.

Improved Hanson Head Lettuce.

MUSKMELON

Culture. Muskmelons delight in moderately rich, light, warm, mellow loam. The seed should be planted in the spring upon the arrival of settled warm weather. Plant seeds 1 inch deep in hills, 4 to 6 feet apart each way, and as soon as the plants begin to run, remove all but 4 of the most likely ones.

Cultivate and keep free from weeds until the vines prevent.
Two to three pounds of seed required per acre.

915. Northrup's Yellow Meated Japan. (Sold only in sealed packages)

This is by far the finest, most luscious and pleasing muskmelon ever grown. Much superior to any other variety, either green or yellow fleshed, it captures the trade wherever and whenever it is offered for sale. All gardeners who have never tried this magnificent melon should purchase at least a package. The vines are hardy, permitting earlier planting, very prolific, and produce very large fruits, nearly as early as the smaller varieties. The melons are nearly round, not deeply ribbed and covered with patches of netting. The skin is yellowish white when ripe. The crowning feature of this melon is found in the thick, melting, delicious, salmon-colored flesh. It is extremely rich, sweet and highly flavored. We know of no other sort which will give as great satisfaction or prove as big a seller as our Yellow Meated Japan Muskmelon. See illustration at right. Large pkt., 5c; oz., 20c; ¼ lb., 50c; lb., \$1.50.



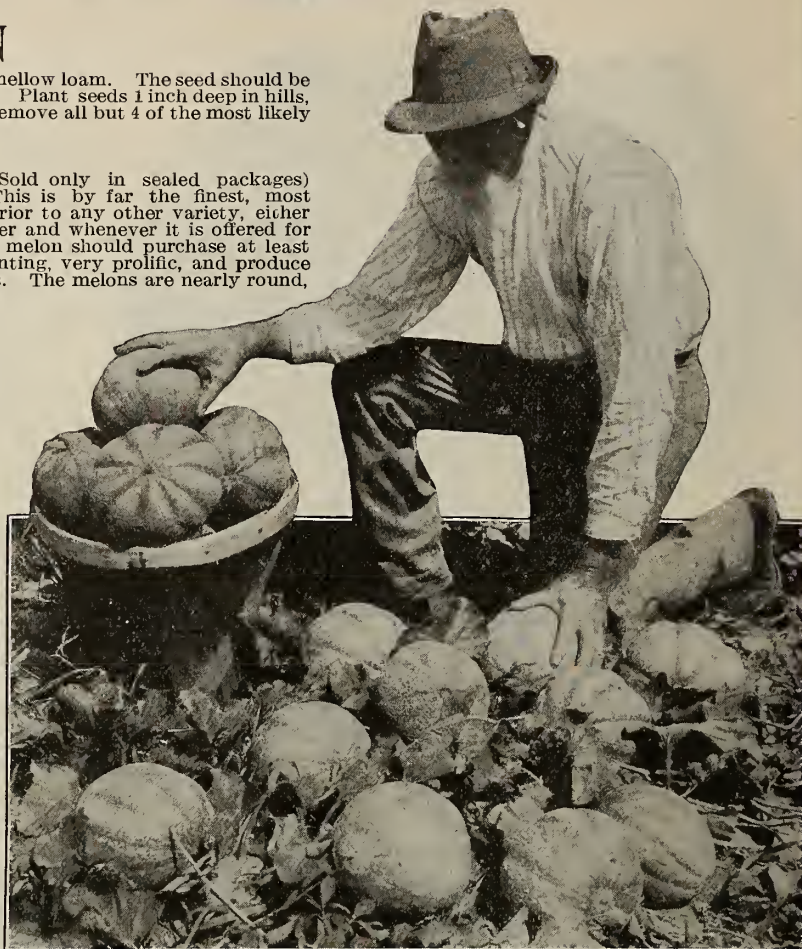
Rocky Ford Cantaloupes.

This melon, found on the bill of fare of the leading hotels and restaurants of America, has become world famous for its sweet, luscious, melting flesh which is of captivating flavor. This variety of melon takes its name from the little town of Rocky Ford, Colorado, which has become famous for these appetizing fruits. The popularity of this melon is best attested by the fact that from ten to twelve hundred carloads of them are annually shipped from Rocky Ford to all parts of the United States, in addition to the large quantities grown and shipped from other stations. It is just the right size to serve in halves and this fact together with its delicious flavor makes it ideal for that purpose. The profits to be derived from growing these melons are very large when proper soil, seed and cultivation are used. It is not uncommon in the vicinity of Rocky Ford for an extra early field to net a profit of from two to three hundred dollars per acre. Perhaps the most important consideration is the seed to be planted. We are offering below the three best strains of Rocky Ford Cantaloupe, each of which has been bred with a particular point in view. Earliness, rust resistance, netting and solid meat are highly important characteristics which have been secured by the persistent efforts of melon breeders in the varieties we offer. Better seed can not be secured.

Best Melon I Ever Grew.

The Yellow Meated Japan Muskmelon, of which I got the seed of you, is the best melon of its class I ever grew either for home or market, and I have grown melons for forty years.

W. T. BERRY, Virginia, Ill.



916. Rust Resistant Pollock. This type is the highest development, both as to netting and rust-resistant qualities, yet attained in the Rocky Ford Cantaloupe. When vines of some varieties are entirely killed by rust and blight within two weeks after the shipping season, the vines are green and continue to blossom and set fruit until frost. The melons run very uniform in size and the exceptionally heavy netting is laced and interlaced over the entire surface, making it an ideal shipper. The flesh is green, shading to salmon about the seed cavity which is unusually small. The meat is solid and fine grained, flavor unexcelled. While a few days later than the Early Watters, it is more prolific. Desirable where there is an excessive rainfall. Pkt., 5c; oz., 20c; ¼ lb., 50c; lb., \$1.60.

917. Netted Rock. This strain represents the highest possible attainment in Cantaloupe development. It is undoubtedly the heaviest meated melon of the Rocky Ford type. It produces melons of uniform standard size, 90 per cent of which are completely covered with a beautiful gray, lace-like netting which with the small seed cavity, are the most essential points in carrying and keeping qualities of the cantaloupe. The flesh is green, tinged with a delicate salmon pink around the seed cavity, which is the smallest of any strain of Rocky Ford. The flesh is firm but not tough or stringy, sweet, luscious, melting and superb flavor. Pkt., 5c; oz., 15c; ¼ lb., 45c; lb., \$1.35.

918. Early Watters, Improved.

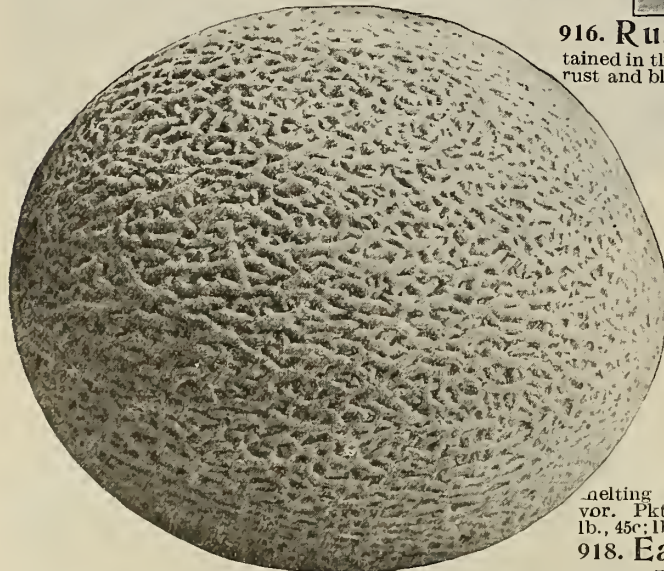
The earliest of all the Rocky Ford Cantaloupes. It is prolific and usually the first setting of the fruit, is very heavy, mostly ripening at the same time. It is of fine shape and size and inclined to run to solid netting. The flesh is light green and of the best quality. The seed cavity is larger than in the other strains, and does not make as good a shipper, but for home use is very desirable. Not recommended for sections having excessive rainfall as the vines are inclined to rust, but where early melons are an object or for dry localities, or under irrigation it is the most valuable cantaloupe. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 85c.

Book on Melon Culture. By James Troop. A very complete treatise on both the muskmelon and watermelon. Soil, cultivation, varieties, harvesting, packing, etc. are all fully discussed. 100 pages, cloth bound. Price, 50c, (postpaid, 55c).

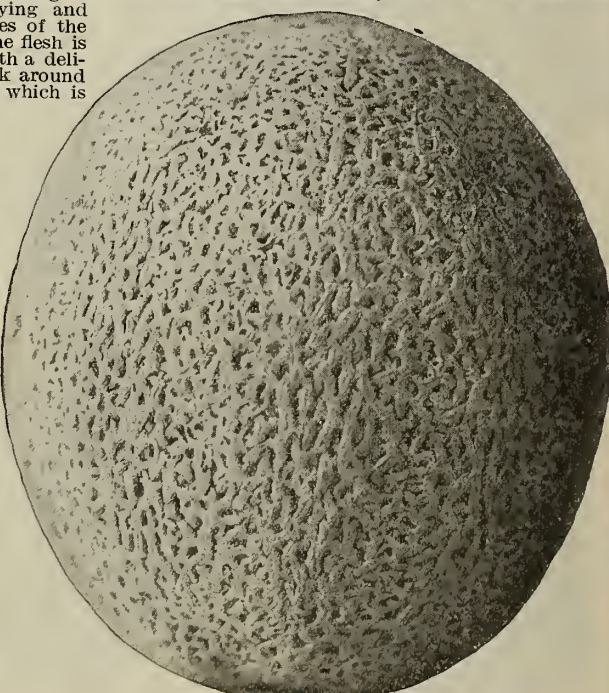
Book on Gardening for Young and Old. By Joseph Harris. Of especial value in the conduct of the farm garden. Has chapters also on flowers and will prove valuable to all members of the family. 191 pages, cloth bound. Price, \$1.00, (postpaid, \$1.10).

Book on How to Plan the Home Grounds. By Samuel Parsons, Jr. A valuable guide to amateurs in arranging grounds, shrubs, trees, flowers, etc. Price, \$1.00, (postpaid, \$1.10).

Book on Agriculture for Young Folks. By A. D. and E. W. Wilson. Of great value in interesting boys and girls in the farm. Very practical. This book is used in many schools for the teaching of elements of agriculture. 340 pages, illustrated, cloth bound. Price, \$1.00, postpaid.



Netted Rock.



Early Watters, Improved.

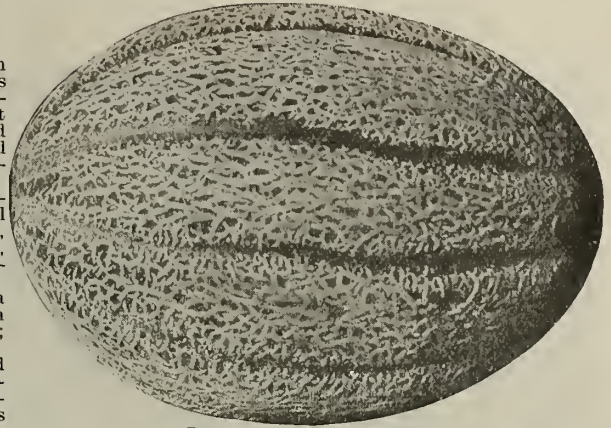
MUSKMELON

920. Burrell's Gem. This new melon is without question unsurpassed in quality, size and shape as a shipping variety. It has a thin tough rind, the ribs of which are closely interlaced with gray netting. The average length is six inches, by four and one-half inches in diameter. They weigh about two and one quarter pounds each. The reddish orange flesh is very thick, fine grained and spicy and of a flavor unexcelled by any other melon. So great has been the demand for this variety by commission houses who have handled them that growers are unable to keep them supplied. Packet, 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

925. Defender. One of the best yellow fleshed sorts, and in some respects is superior to all others. The melons are medium sized, oval in shape, slightly ribbed, and covered with gray netting. The flesh is firm, fine grained, rich, deep yellow and of high flavor. The rind is very thin, but is very hard and firm, making it an exceptionally fine shipping variety. The vine is vigorous and very productive. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

930. Early Netted Gem. Slightly oval in form; finely netted, being a light golden hue when fully ripened. Flesh light green in color, melting and luscious in flavor, ripens close to the skin. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 85c.

935. Emerald Gem. Very early. A richly flavored melon, salmon colored flesh which is almost crystal in appearance, the flavor being rich, very sweet and luscious. The skin is quite smooth, and of a beautiful deep green color. This variety is very prolific and is one of the most valuable sorts in cultivation. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 55c; lb., \$1.60.



Burrell's Gem Muskmelon.

953. Hoodoo. Flesh is fine grained and sweet, deep orange in color and extremely thick with small seed cavity. Fruits are round and about the size of Rocky Ford, making them convenient both for the table and for packing in shipment. As a shipper it can't be surpassed. A wonderfully prolific sort. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

955. Improved Yellow Cantaloupe. Large oval-shaped fruit with deep ribs. The flesh is salmon yellow and very sweet. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 80c.

960. Jenny Lind. This is the earliest of the green fleshed sorts and one of the sweetest. It is round or flattened. In size it is small, being from three to five inches in diameter—a very convenient size for serving in halves. The vines are very prolific and the culture profitable. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

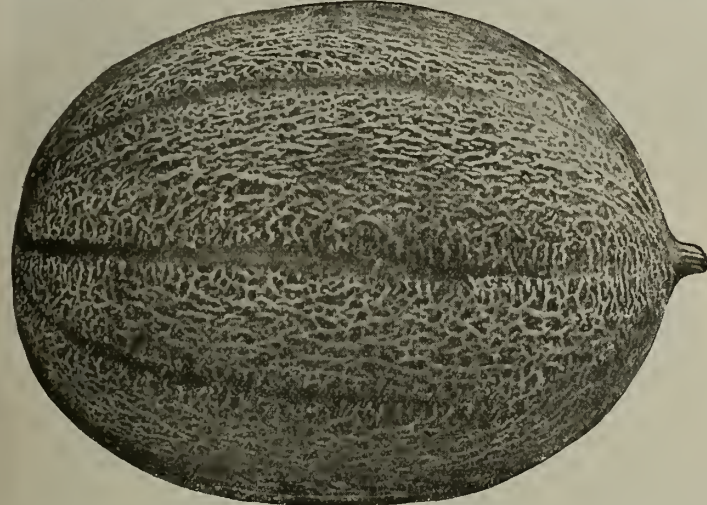
965. Long Island Beauty. Fruits of large size, well flattened, heavily ribbed and netted. Of very handsome appearance and fine quality. Very highly recommended; ripens early and is superior in flavor; green fleshed. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 45c; lb., \$1.50.

970. Osage or Miller's Cream. Fruit medium sized, oval, slightly ribbed, dark green in color, banded with lighter streaks, covered more or less with shallow netting. The flesh is deep salmon color and very thick, there being but a slight cavity in the center of even the largest fruit, and of exceptionally fine quality. A favorite variety for the later markets. We have taken a great deal of pains to develop the thick, deep, rich colored and fine flavored flesh of this sort. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 45c; lb., \$1.50.

975. Paul Rose or Petoskey. Combines all the good qualities of the Netted Gem and Osage, the varieties from which it originated, possessing the sweetness of the latter with the finely netted appearance of the Gem. Fruit oval, about 5 inches in diameter, shape and general appearance similar to the Netted Gem, of a light green or faint golden hue when fully ripe. Firm flesh, a rich orange red like the Osage, but even sweeter and higher flavored; ripens close down to the rind, with small seed cavity; the most uniformly good of any muskmelon grown. Best shipper, just the size for hotel and table use. Really has no equal as a market melon for professional growers and one of the very best sorts for the home garden. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

985. Tip Top. The melons are round, well ribbed, with light green skin which becomes netted when ripening. They average seven inches in diameter. The flesh is quite thick, bright salmon in color, and of luscious, melting flavor, but sufficiently firm for shipping purposes. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

Booklet on Vine Crops. Contains concise information on the raising and care of Muskmelons, Watermelons, Cucumbers, Tomatoes, Squash, etc. It advises as to seed selection, storing and shipping. Will be sent free with orders when requested or mailed to any address for 5c in stamps.



Osage or Miller's Cream Muskmelon.

940. Extra Early Citron or Early Nutmeg. A standard and well known variety. Fruits are round, 6 to 8 inches in diameter, ribbed and netted. Flesh is thick and pale green in color, very sweet. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

945. Extra Early Hackensack. Fruit attains a good size, weighing four to six pounds each. The melons are round, heavily ribbed; skin is green and thickly netted; flesh is light green, of delicious flavor, rich and sugary. It is also a luxuriant, healthy grower, and exceedingly productive. The earliest of all large netted melons. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

947. Grand. A week to ten days earlier than Osage. Flesh is salmon colored, firm, fine grained, very thick, melting and delicious. An extra good shipping sort. Melons about six inches in diameter. Very productive. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$2.00.

950. Hackensack or Turk's Cap. Fruit very large, round, heavily ribbed and netted. Flesh green, thick, coarse, very sweet and fine flavor. Hardy and very productive. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

990. Melon Peach. Also known as Vegetable Orange, Vine Peach, Vegetable Peach and Mango. The fruit is about the size of a large peach, oval-shaped and of a bright orange color, somewhat russeted. When they first ripen the fruit falls from the vine, then they are quite hard with little taste, but soon become mellow and fit for use. Melon Peaches are not eaten raw, but are fine for preserves, pies, pickling, etc. For this purpose they are delicious if first peeled and seeds removed, then cut in thick slices. For preserves treat like any fruit, using half sugar and half fruit, a little lemon essence or a few pieces of sliced lemon. For pies, slice and season the same as green apples, using top and lower crusts and bake slowly. This new pie when first eaten will not be soon forgotten, making a most appetizing dessert. Melon Peaches are very easily grown, same as melons and are very productive. Pkt., 10c; oz., 40c.

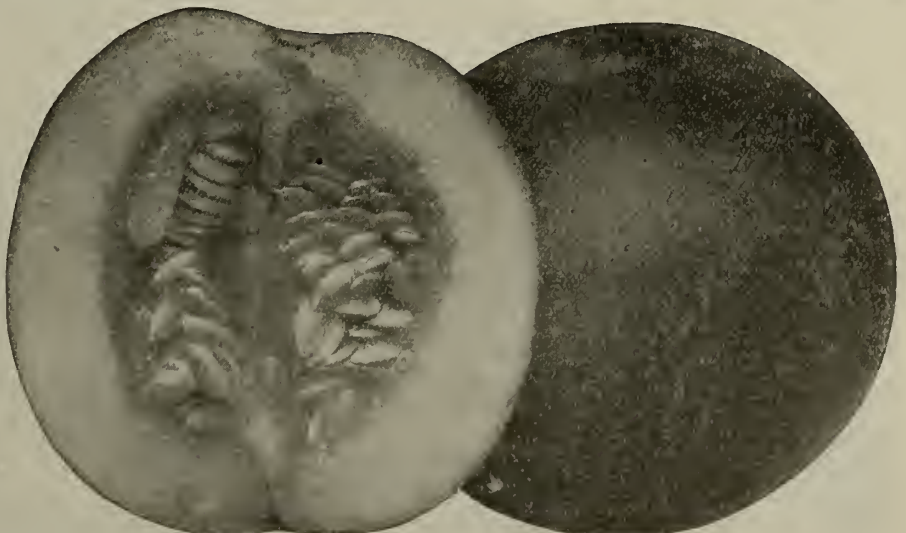
995. Garden Lemon. Resembles very much in habit of growth the Melon Peach. The fruit is round, some what smaller than the Melon Peach; has thinner flesh, and is decidedly more acid in flavor. Pkt., 10c; oz., 35c.

997. Cassaba Melon. Cassaba Melons are a little different from both muskmelons and watermelons. The skin is smooth and hard, flesh extremely tender, rich, sweet and juicy. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c.

Went Wild Over Them

The Melon Peaches were grand. Everyone who tasted them were wild over them.

C. M. FIRTH, Claremont, Minn.



Melon Peach.

WATERMELON



Northrup, King & Co.'s Klondike Watermelon. The Earliest Watermelon Grown.

Culture. The soil for water melons must be light, rich and sandy, for if grown on a heavy soil the quality will be poor, and they will not be so early. When there is no more danger of frost, drop 8 to 10 seeds in hills 8 to 10 feet apart each way, covering about $\frac{3}{4}$ inch deep. As soon as plants commence to run, thin out to 3 best plants in a hill and cultivate until the vines cover the whole ground. If slow to fruit, pinch off the ends of the growing shoots. Ashes or air-slacked lime sifted on the young plants while dew is on is good to keep the insects out. One ounce will plant about 30 hills, and it takes 4 to 5 pounds to one acre.

850. Northrup, King & Co.'s Klondike. (Sold only in sealed packages.) The earliest. The great objection to the extremely early watermelons has been their inferior quality. This has been entirely overcome in the Klondike, which is offered with the assurance of being, not only remarkably early, but as sweet, delicate and melting in flavor as any variety grown. The flesh is of a deep scarlet. Rind thin, and on this account is not a particularly good shipping sort, but is emphatically the variety for home use and sale. It will ripen in altitudes where it has not been thought possible to mature a good watermelon. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

855. Northrup, King & Co.'s Kentucky Wonder. (Sold only in sealed packages.) One just cause for criticism of many of the new melons is that, for the most part, they have been, at the best, slightly improved strains of some old and well known sort. This cannot be said of Kentucky Wonder. It is distinct, and the melon itself proves it. In shape it is oblong, attaining a good size; skin dark green and beautifully marked. Flesh a beautiful rich scarlet color, crisp, rich, sugary, always firm and solid, never mealy or tough. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

860. Dark Icing. Rind thin, but very strong; one of the best for early shipping. Fruit large, very dark skinned and of attractive appearance. Flesh rich, bright red, and of fine quality. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 60c.

865. Fordhook Early. An extra early watermelon of large size. The rind is tough, making it desirable for shipping purposes. Flesh is bright red and very sweet. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 70c.

870. Harris' Earliest Watermelon. Sweetest, largest early melon. Melon is oval to oblong; beautifully striped with green and gray; bright red flesh, which is sweet, tender and delicious. It is the melon for everybody to grow who wants to be first in the market with fine large melons weighing 20 to 30 pounds. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 60c.

875. Ice Cream or Peerless. Rind thin, light mottled green. Flesh bright scarlet. Solid to the center. Sweet as honey. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 55c.

880. Kleckley's Sweets. The finest of all medium early watermelons for home use. The rind is too thin and tender to stand long distance shipment. The fruits are uniform in size, oblong in form, the skin is a rich dark green, the flesh, bright scarlet, the seeds lie close to the rind, leaving a very large, solid, red core. The flesh is rich, sugary and melting, being entirely free from stringiness. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 80c.

885. Kolb's Gem. Very large, slightly oval, striped with light and dark green. Rind very hard and firm. Flesh bright red, solid, coarse grained, but tender and sweet. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 55c.

890. Mammoth Ironclad. Large fruits nearly two feet long. Skin dark green with lighter stripes. Rind thin but exceptionally tough. Flesh bright red, firm, solid and crisp but rich and sugary. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 60c.

895. Phinney's Early. Very early, quality good; hardy. Bears melons with thin, smooth rind; flesh pink and tender. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 55c.

900. Sweetheart. Remains in condition for use longer than any other sort. Fruit early, large, oval and very solid. Flesh bright red, tender and sweet. Rind thin, but strong, making it a good shipper. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 55c.

905. The Dixie. This watermelon is the best shipping melon grown, being even larger, earlier and far more productive than the Kolb's Gem, which has heretofore been considered the best melon for shipping. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 60c.

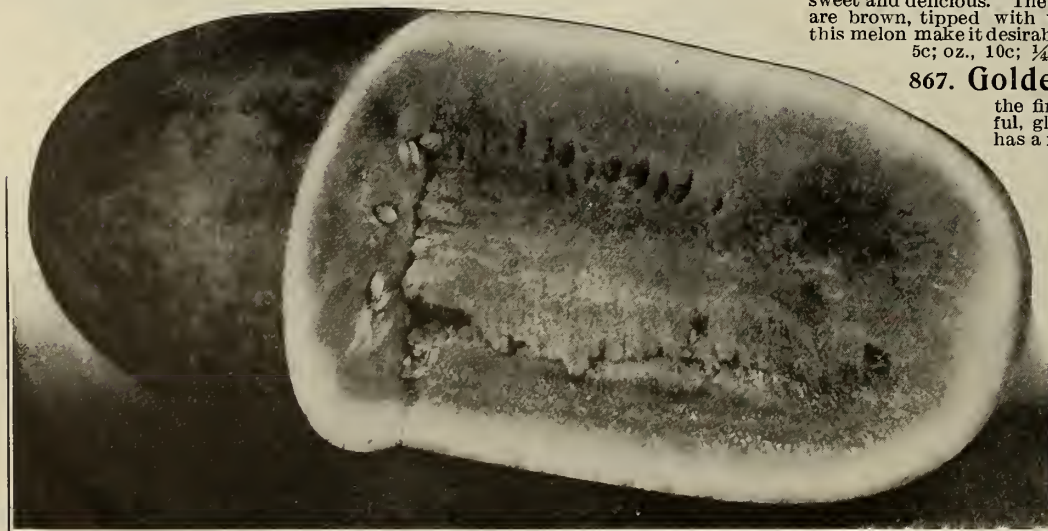
908. Tom Watson. A large, oblong melon, the skin of which is dark green, with thick netting on the entire surface, quite distinct from other varieties. It averages 18 to 24 inches long and 10 to 12 inches in diameter and weighs 50 to 60 pounds. The rind is thin but tough and flesh a bright, attractive red color, crisp, sweet and delicious. The heart is large with no core. The seeds are brown, tipped with white. The appearance and quality of this melon make it desirable for both home and market use. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., 90c.

867. Golden Honey. A beautiful, golden-fleshed melon, one of the finest we ever tasted. The flesh is a beautiful, glistening amber yellow, very tender, and has a most delicious flavor. It is medium early, of uniform large size, oblong shape and of handsome appearance. The rind is light green, with mottled stripes. Some are more or less prejudiced against a yellow-fleshed melon, but this dislike will disappear once the Golden Honey is tasted. This melon has no hard core or stringy sections. The rind is thick and the seeds are large and white, some having a small black tip. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

910. Citron for Preserves. Fruit round and smooth. Is not eaten raw, but is used for making a very clear, transparent preserve of peculiarly fine flavor. Flesh, white and solid. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 85c.

Special Note.

All vegetable and flower seeds sent prepaid except where noted. See page one for general suggestions to customers, parcel post rates, shipping seasons, freight claims, etc.



Kleckley's Sweets Watermelon.

ONION RED VARIETIES

1000. Northrup, King & Co.'s Minnesota Red Globe.

Sold only in Sealed Packages. This

beautiful strain of Red Globe Onion surpasses all others in earliness, productiveness, perfection of shape, uniformity of size, richness of color, and long keeping qualities.

For years we have been patiently working to improve our Red, Yellow and White Globe Onions, not only by reducing the size of the neck, but also rounding off the projecting bottom, while at the same time giving due attention to the shoulder of the bulb. This has resulted in a true globe-shaped onion of great solidity and long-keeping qualities; the very small neck not only prevents water-logging, rot and shrinkage but also insures early maturity and perfect ripening down.

The color of Minnesota Red Globe is a deep blood-red, extra dark, while the surface is smooth and glossy. The flesh is white, tinged with light purple, fine grained and unsurpassed in flavor.

Many of the largest growers in the United States have annually used our Minnesota Red Globe Onion seed for more than a decade, convinced that Northrup, King & Co.'s strain is unequalled for the North.

For a long time onions have been the biggest money-making crop for the farmer. It is true that the onion market has its ups and downs, like all produce, but at the average price of about 65c per bushel in the Autumn, and the ordinary yield of 400 to 500 bus. per acre, onions yield highly satisfactory returns to the grower. One often reads glowing accounts of enormous onion profits, yields of 600 to 1000 bushels are not unknown. With intensive cultivation, experience and skill these yields are within the reach of all in a normal year.

Everywhere globe onions bring the best prices and since our Minnesota Red, Yellow and White strains are the most highly developed of all globes we confidently recommend them to growers who want onions that will top the market.

A sound, well ripened onion crop can be put away in the Autumn and held for 6 to 8 months under suitable conditions with a shrinkage of not much more than a pound per bushel per month. Experienced growers are careful however to plant a select strain of seed which has been bred to produce long-keeping, perfectly ripened bulbs. Consequently the demand for our Minnesota strains is continually increasing, many growers now place their orders a year in advance.

Price for Northrup, King & Co.'s Minnesota Red Globe, Onion pkt., 10c; oz., 25c; ¼ lb., 75c; lb., \$2.35.

1020. Extra Early Red (Or Extra Early Red Wethersfield.)

Flat. Ready for use about two weeks earlier than Large Red Wethersfield. Fine grained early marketing. Best where sea-

um sized flat variety, good yielders. weeks earlier than Large Red Wethersfield and mild in flavor. Very desirable for sons are very short. Good keeper.

Pkt., 5c; oz., 15c; ¼ lb., 40c; lb., \$1.25.



1015. Large Red Wethersfield.

Very popular, a sure and heavy yielder; the best keeper, grows to an immense size, solid, oval-shaped, flattened on top; skin purplish red, smooth and glossy; flesh white, slightly tinged with pink, strong flavored. The best variety for poor or dry soil. Pkt., 5c; oz., 15c; ¼ lb., 45c; lb., \$1.35.

Large Red Wethersfield

onions measure from two and a half to three and a half inches in diameter, and are very uniform both in size and shape. Our seed has been selected to thin neck plants which ripen down to a hard, solid ball, producing the largest proportion of marketable onions. They are also good keepers.

The globe varieties, as a rule, yield the largest crops, from 800 to 1000 bushels an acre being reported frequently. The Red Globe meets with the greatest demand in the Northwest. Pkt., 5c; oz., 20c; ¼ lb., 60c; lb., \$1.85.

All vegetable and flower seeds sent prepaid except where otherwise noted.

For culture of onions see page 35.



Northrup, King & Co.'s Minnesota Red Globe.

1025. Large Red Globe. A handsome, dark red, globe-shaped onion. It averages three inches in diameter and nine to ten ounces in weight. The bulbs have thin necks, which ripen down forming a hard, solid, globular bulb. This is a fine strain which will please all who grow it. Pkt., 5c; oz., 20c; ¼ lb., 55c; lb., \$1.75.

1105. Red Bermuda. Bulbs of this variety are similar in form and early ripening to the Bermuda White, but grow larger in size, ranging from three to four inches in diameter; very flat and of a light pink color. The flesh is white, slightly suffused with pink. Pkt., 10c; oz., 25c; ¼ lb., 75c; lb., \$2.50.

1085. Southport Red Globe. In all markets, globe onions are in greatest demand, being of such shape that there is practically no waste. The onion which is perhaps the best known throughout the United States is the Southport strain. The Red Southport is perfectly globe-shaped and very handsome in color. The globe varieties, as a rule, yield the largest crops, from 800 to 1000 bushels an acre being reported frequently. The Red Globe meets with the greatest demand in the Northwest. Pkt., 5c; oz., 20c; ¼ lb., 60c; lb., \$1.85.

The globe varieties, as a rule, yield the largest crops, from 800 to 1000 bushels an acre being reported frequently. The Red Globe meets with the greatest demand in the Northwest. Pkt., 5c; oz., 20c; ¼ lb., 60c; lb., \$1.85.

All vegetable and flower seeds sent prepaid except where otherwise noted.



Southport Red Globe Onions.

ONION

YELLOW VARIETIES.

1010. Northrup, King & Co.'s Minnesota



Yellow Globe.

Sold only in Sealed Packages. We have for years been working on the popular Yellow Globe Onion to bring it to the same degree of perfection attained by our Minnesota Red Globe and we now feel that we have succeeded in producing a type of Yellow Globe unequaled by any other strain in existence. It is a large globe shaped onion of the same general characteristics as our Minnesota Red Globe and will never prove a disappointment to the grower. If yellow onions are preferred, try this strain. Pkt., 10c; oz., 25c; ¼ lb., 75c; lb., \$2.25.

1080. Northrup, King & Co.'s Prize Taker.



Sold only in Sealed Packages

This onion has become a great favorite on account of its large size and great solidity. It is perfectly globe-shaped, with straw colored skin; the necks are very small and the onions always ripen up hard. An excellent keeper, exceedingly fine flavor, grows to an enormous size, onions weighing five pounds having been grown from seed the first year. Pkt., 5c; oz., 20c; ¼ lb., 55c; lb., \$1.75.

1095. Southport Yellow Globe. Very similar to the Southport Red Globe, except that it averages a trifle smaller and matures a little earlier. The skin is a rich brownish yellow, the flesh white, crisp and fine grained. Great care has been given to the selection of our seed, so as to give uniformity of size, shape, small necks and heavy yield. Pkt., 5c; oz., 20c; ¼ lb., 60c; lb., \$1.85.

1120. Long Keeping Australian Brown Onion.

This remarkable onion is of medium size, wonderfully hard and solid and most attractive for market, both in form and appearance. They are extremely early in ripening and make no stiff necks or scallions. Every seed seems to produce a good-sized onion, and the bulb begins to form very quickly when the plant is not over 3 inches high. Planted with the Red Wethersfield it will average nearly four weeks earlier, and ripen off more uniformly. It has the reputation of keeping indefinitely, and we think from its firmness and hardness that it will keep in good condition longer than any other onion known. The color of the skin is a clear amber-brown. These onions have been known to keep nearly a whole year in good condition, and on this and other accounts it will commend itself to onion set growers, who often lose heavily in carrying their crop because the sets do not "keep." Pkt., 5c; oz., 15c; ¼ lb., 40c; lb., \$1.25.

1035. Yellow Danvers Flat, or Round. Very productive, medium size, round, flat, early. Very reliable, small neck; thin, pale yellow skin. Flesh white, fine grained and mild. Pkt., 5c; oz., 15c; ¼ lb., 40c; lb., \$1.25.

1040. Yellow Globe Danvers. The bulbs are large and globular, with very thin necks; rich orange yellow color. An enormous yielder and a fine keeper. Flesh white and mild. Pkt., 5c; oz., 20c; ¼ lb., 55c; lb., \$1.75.

Excellent Satisfaction.

Your Yellow Globe Danvers Onion seed gave excellent satisfaction. R. ROESCHEISEN, Orient, Wash.

1045. Yellow Strasburg or Dutch.

Later, darker in color and more flat than Yellow Danvers Flat. Flesh pure white and of mild flavor. The best variety to grow for sets, and is a splendid keeper. Pkt., 5c; oz., 15c; ¼ lb., 40c; lb., \$1.25.

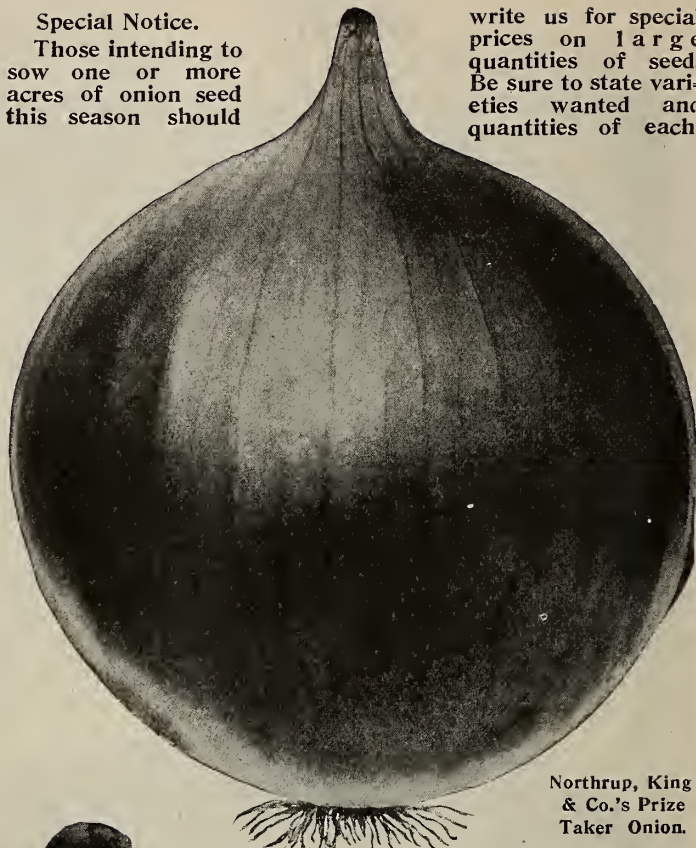
Buy Early.

Seed of high-grade Yellow and Red Globe Onion is again in short supply this season. We urge customers to place orders early.

Special Notice.

Those intending to sow one or more acres of onion seed this season should

write us for special prices on large quantities of seed. Be sure to state varieties wanted and quantities of each.



Northrup, King & Co.'s Prize Taker Onion.

1093. Ohio Yellow Globe.

A very desirable yellow globe-shaped onion. The main features which distinguish this strain from others are its distinct and attractive shape, handsome, bright, even color; ripens early and all at once; necks very small and cure down very close. The bulbs are firm, solid and keep exceptionally well during the winter. The yield, size and quality are all that could be desired in a yellow globe onion. Although this strain was first introduced in Ohio, the seed we offer is thoroughly acclimated and is suitable for northern conditions. Pkt., 5c; oz., 20c; ¼ lb., 60c; lb., \$2.00.

Fertilizers.

The two principal fertilizers for Onions are Nitrate of Soda and Muriate of Potash; the latter being used on muck lands. Nitrate of Soda furnishes the young plants with the most essential plant food, nitrogen, in soluble form. For fertilizers of all kinds see pages 154 and 155.

Garden Tools.

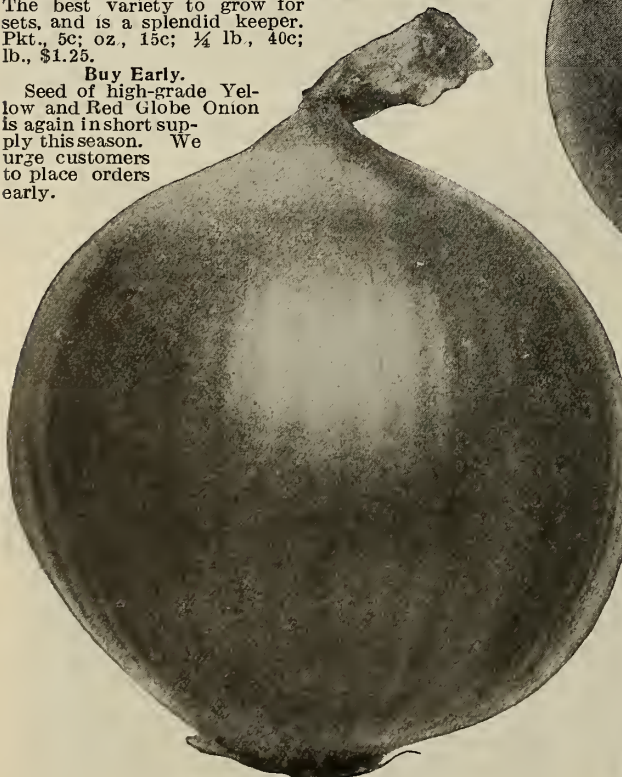
We handle a full line of Planet Jr. Garden Drills and Cultivators, also weeders, hand cultivators, etc. See pages 152 and 153.



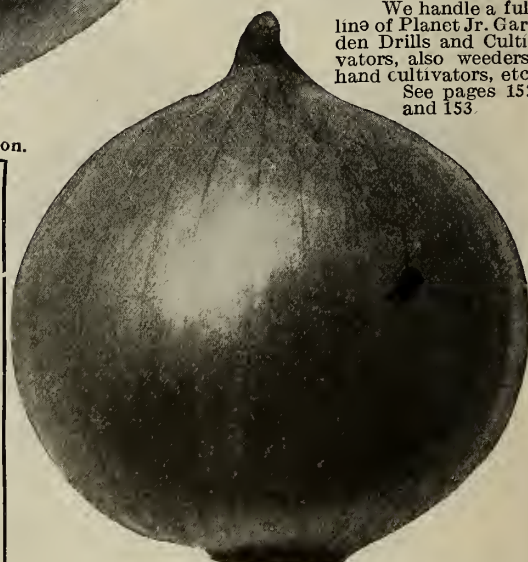
Yellow Globe Danvers Onion.

Booklet on Onion Culture.

A 36 page treatise on onion raising from seed to marketing. In concise, intelligent language it tells of soil selection and preparation, fertilizers and how to apply them, cultivation, varieties of seed to sow, the new onion culture and methods of seeding, weeding, harvesting, storing, marketing and shipping. This little book has assisted many onion growers to earn increased profits. We will send it free with orders when requested, or will send it by mail, postpaid to any address for 5c in stamps. The New Onion Culture. By T. Greiner. A complete guide on the growing of onions with the greatest profit. Price, 50c, (postpaid 55c).



Southport Yellow Globe Onion



Ohio Yellow Globe Onion.

ONION WHITE VARIETIES.

Culture. Onions thrive well in any good soil, although very sandy soils are apt to dry out to too great an extent. Probably the very best soil for this purpose is old land that has been kept up to a high state of fertility and free from weeds, fall plowed and thoroughly pulverized in the spring.

Sow the seed early in the spring, about $\frac{1}{4}$ inch deep in rows 12 to 15 inches apart. It is tedious work thinning onion plants so to avoid unnecessary labor it pays to plant seed of highest germinating qualities; then the seed can be sown just a trifle thicker than the onions are to stand and little thinning will be required.

In the case of large varieties, like Prizetaker and Mammoth Silver King, the young seedlings should be transplanted so as to permit the plants to reach full size and development.

As soon as the plants begin to break through the soil, pass over the rows with a wheel cultivator which works both sides of the row at once and throws a little soil away from the base of the plants and as soon as cultivated they should be weeded. Cultivate and hand weed every two weeks throughout the summer as it is much easier to handle the crop in the fall when entirely free from weeds.

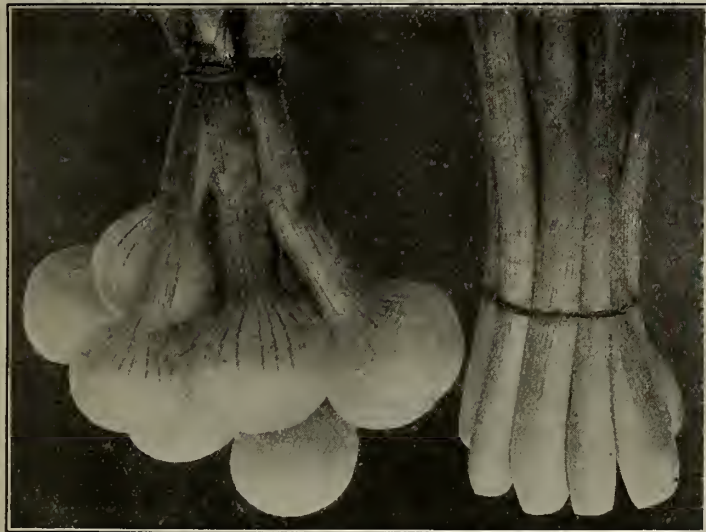
One oz. of seed for 100 feet of row; 5 to 6 lbs. seed per acre.

1005. Northrup, King & Co.'s Minnesota

White Globe. Sold only in Sealed Packages. White varieties are the mildest in flavor of any of the onions and are, on this account, often preferred for family use. Our Minnesota White Globe is the most perfect in shape of any White Globe strain. Most White Globe stocks are marred by dark, rusty streaks. Our Minnesota White Globe is almost entirely free from this blemish and is the purest in color of any White Globe type. This is in every way the finest White Globe Onion in existence. Pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., 85c; lb., \$2.75.

1090. Southport White Globe. White Globe Onions command the highest market prices when they are true globe-shaped and free from stain. Our Southport White Globe Onion meets these requirements, having a thin skin of purest whiteness. The flesh is crisp, fine grained, very white and mild. As soon as ripe, the bulbs should be stored in a cool, dark shed or dry cellar. Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 75c; lb., \$2.25.

1100. Crystal White Wax Bermuda. This new variety is a large, pure-white, flat onion. During the last few years it has become very popular with the large growers of onions in the South, especially in southwest Texas. It does very well under northern conditions and produces one of the mildest and sweetest of them all. It is very fine for slicing, the color being so clear and pure. The best seed is produced in Teneriffe, Canary Islands. Our stock is genuine. Pkt., 10c; oz., 50c; $\frac{1}{4}$ lb., \$1.50; lb., \$5.00.



White Bunching Onions.

White Welsh Onions.

1032. White Bunching. An extra early, round, white variety of very fine quality, long before the other sorts are ready. For early bunching or using green, it is unsurpassed. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.50.

1033. White Welsh. A very hardy, perennial variety of onion used only for bunching or early green onions. Much superior to the Egyptian onion, which grows a tough woody stem. This onion is entirely free from this objection. Sow seed thinly in rows 12 to 16 inches apart. Perfectly hardy and require no mulching. Seed may be sown in late summer or early fall months for early spring onions. Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 75c; lb., \$2.50.

1030. White Barletta. This variety is more distinct on account of its earliness. It is earlier than the White Queen. It is of a beautiful waxy white color and grows $1\frac{1}{4}$ inches in diameter and $\frac{3}{4}$ of an inch thick, with finely formed bulbs, slightly flattened at the top. Its earliness will highly recommend its use as a substitute for onion sets. An excellent bunching and pickling sort. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 55c; lb., \$1.75.

1125. Mammoth Silver King. In appearance, the most striking onion grown. We hardly know which to commend the most, its large size, symmetrical appearance and beautiful, silvery flesh or its sweetness, tenderness and mild flavor. These qualities make it the best for exhibition and fancy high-priced trade. Not recommended for the extreme North except for bunching. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.50.



Northrup, King & Co.'s Minnesota White Globe Onion.

1110. White Bermuda. The bulbs are quite broad and flat white, as in our American varieties, but rather a pale straw; flesh crisp, solid and mild in flavor. The plants are extremely thin-necked, insuring even and early ripening. Pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., 85c; lb., \$2.75.

1055. Paris White Silver Skin. An early, small, round, white variety. Excellent for bunching and pickling. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 45c; lb., \$1.35.

1058. White Lisbon. A large, round, fine white onion of excellent quality. An exceptionally early variety, splendid for using green or early bunching. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 55c; lb., \$1.75.

1060. White Pearl or Extra Early Bloomsdale.

While originally from Europe this is now fairly entitled to rank as an American variety. It is a pure silvery-white onion of very quick growth, frequently maturing in seventy days from sowing the seed. Bulbs are flattened, of medium size, with silvery-white skin; flesh crisp and mild in flavor. This variety is largely planted for bunching and for sets. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 65c; lb., \$2.00, postpaid.

1065. White Portugal or American Silver Skin.

Bulbs medium size, ripening early and uniformly, with beautiful, clear white skin; flat, good keeper, delicate and mild flavor. Used largely for pickles, also as a bunching onion. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 55c; lb., \$1.75.

1075. Northrup, King & Co.'s Pickling.

(Sold only in sealed packages.) For early bunching, pickling and sets. Small, hard, round; keeps well; pure white, does not turn green when exposed to the sun. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$1.85.

1070. White Queen. Small; noted for extreme earliness and mildness of flavor. Bulbs average about an inch in diameter and are much used for pickling. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.50.

Egyptian Winter, or Red Perennial Onion Sets.

A hardy Onion for September and October Planting. Orders Booked Now.

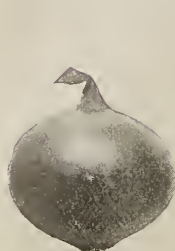
Entirely distinct from all other varieties of onion; being perfectly hardy everywhere. They should be planted in the fall and left in the ground all winter. These sets never form large bulbs but produce the earliest, small, green onions ready for home or market use weeks ahead of any other sort, unsurpassed in sweetness and tenderness. It is best to replant every autumn and use both roots and tops the following spring. Slight winter protection is required, just a few inches of coarse litter spread on the crowns after the ground freezes, to prevent root heaving. Orders sent before fall will be filled in September. Lb., 12c; 5 lbs., 50c; 10 lbs., 95c; 25 lbs., \$1.75; 50 lbs., \$3.25; 100 lbs., \$6.00. If wanted by mail add 10c per lb. to cover extra cost. See following page for onion sets for spring planting.



Egyptian Onion Sets.

ONION SETS

We are Headquarters in the Northwest for Strictly No. 1 Northern Grown Onion Sets.



Red Bottom Onion Sets.



White Bottom Onion Sets.



Yellow Bottom Onion Sets.



Yellow Multiplier Onion Sets.



Egyptian or Perennial Onion Sets.



Red Top Onion Sets.

The Importance of Using Northern Grown Onion Sets.

The planting of Onion Sets is increasing rapidly year after year. They are used for several purposes. The Bottom Onion Sets produce a large onion ready for market from four to six weeks earlier than can be had by sowing the seed and the product of the set is the same as that obtained by sowing seed. This enables the grower to sell his entire crop earlier in the season, at which time prices usually are higher than when the bulk of the crop reaches market. It also permits the sowing of another crop on the land the same year. Bottom Sets also produce good green onions on most any soil in half the time it takes to raise them from seed.

Bottom Onion Sets are produced by sowing seed very thickly and they are harvested before they have reached full development. Our sets are small, one inch or less in diameter, dry and unsprouted.

Multiplier Onion Sets are formed through the division of the bulbs into many smaller ones; they are not grown from seed.

Red Top Sets are produced like seed on the top of the stalks. Top Sets make large bulbs one year and top sets the next.

We grow our own Onion Sets which enables us to produce hard, sound, clean sets of the best quality. As they are used to obtain onions earlier than they can be had from seed, it follows, therefore, that Northern grown sets will produce onions earlier than Southern grown sets. We clean them thoroughly so as to be free from trash and rubbish, which is so often included with many of the onion sets ordinarily sold. In the spring of the year our sets are hard and sound, while at that time Southern sets are very often so dried and shriveled and so lifeless that they either grow slowly or fail entirely to make a bulb.

About Prices. Since the value of Onion Sets fluctuates greatly, our prices are subject to market changes. The prices below are those existing at the time of publication. Top sets weigh 28 lbs. per bushel, all others 32 lbs. per bushel. All transportation charges on onion sets are to be paid by the purchaser, except where quoted postpaid. For methods of packing Onion Sets see below.

If you plant Onion Sets in large quantities ask us for prices.

White Bottom Sets. These are small, solid and of a beautiful silvery white, a favorite sort in private and market gardens. Lb., 20c, (postpaid, 30c); 5 lbs., 85c; 10 lbs., \$1.65; 25 lbs., \$3.50; 50 lbs., \$6.50; 100 lbs., \$12.50.

Red Bottom Sets. Northern grown. Bright, deep red in color, even and dry. The most popular variety. Lb., 15c, (by mail, 25c); 5 lbs., 65c; 10 lbs., \$1.25; 25 lbs., \$2.75; 50 lbs., \$5.25; 100 lbs., \$10.00.

Yellow Bottom Sets. Produced from seed which makes the finest yellow sets. Fine and dry, medium in size and unsprouted. Lb., 15c, (by mail, 25c); 5 lbs., 65c; 10 lbs., \$1.25; 25 lbs., \$2.75; 50 lbs., \$5.25; 100 lbs., \$10.00.

Prize Taker Onion Sets. See page 34 for full description. These sets are excellent for use in the localities where the season is too short to grow matured bulbs of this splendid large onion from seed. Lb., 25c, (postpaid, 35c); 5 lbs., 85c; 10 lbs., \$1.65; 25 lbs., \$3.50; 50 lbs., \$6.50; 100 lbs., \$12.50.

Red Top Sets. These are planted to produce both early green onions and large eating onions. We wish to call special attention to the fact that our stock is the genuine Red Top Set, unmixed with Egyptian Winter Sets, which are always cheaper, but practically worthless for spring planting. Lb., 35c, (postpaid, 45c); 5 lbs. at 30c per lb.

White Multiplier. These are of a pure silvery-white color which runs up the stem, the flavor is very sweet and mild, superior to green onions from other sets. They are enormously productive, frequently producing as many as twenty onions in a single cluster from one bulb planted; of excellent quality and size for bunching. Ready for delivery on or about June first. Lb., 30c, (by mail, 40c); 5 lbs. or more at 25c per lb. at purchaser's expense.

Yellow Multiplier. Often preferred on account of their earliness. Late in June they are fully ripe, and can be gathered. They are very productive, five to fifteen bulbs growing from one bulb set out. Lb., 20c, (by mail, 30c); 5 lbs., 85c; 10 lbs., \$1.65; 25 lbs., \$3.50; 50 lbs., \$6.50; 100 lbs., \$12.50.

Egyptian Winter or Perennial Onion Sets. See page 35.

Garlic. For description and prices see page 27.

How We Pack Onion Sets.

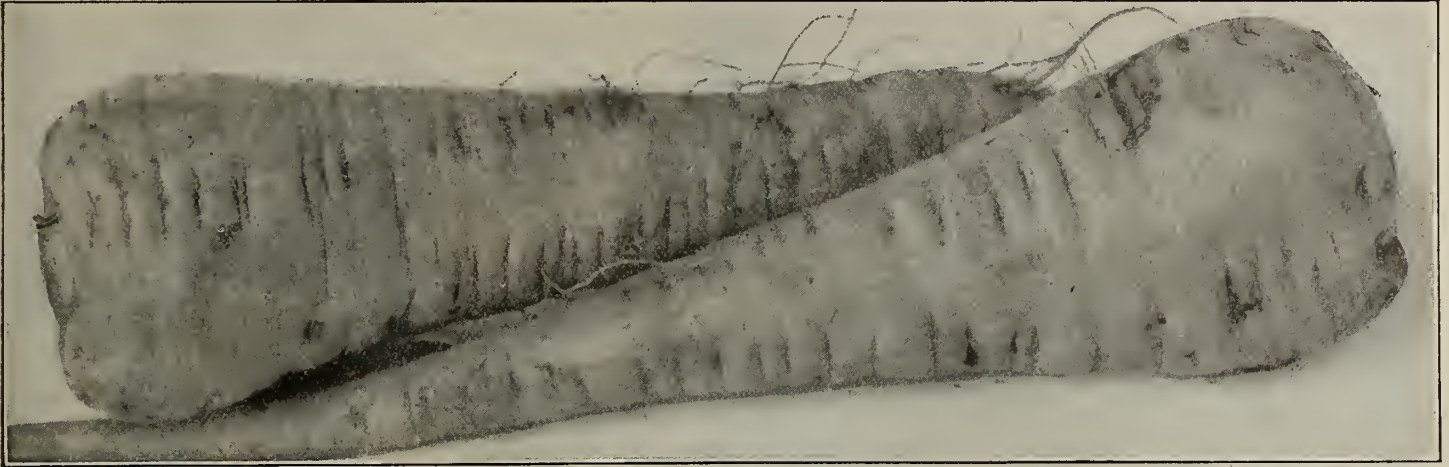
We will pack our Onion Sets in any way our customers desire, in bags, baskets or barrels. Prices named are based on the use of bags. If desired in barrels we will pack three to four bushel orders and upwards at no additional charge. In our opinion the best, safest and cheapest method is to ship in bushel baskets. These will be furnished at an additional charge of 10c per bushel. In this way they carry safely to any part of the United States. The package is easily handled and perfectly ventilated, the sets are not crushed and the basket can always be found of use to the purchaser. Large buyers of onion sets should write us for special prices.

Culture. Soil requirements the same as for onion seed. Place the onion sets 3 to 4 inches apart, according to size, 3 inches deep, in rows 1 foot apart. It is customary to furrow out the soil with a little hand plow early in the spring, set the onion in this furrow right side up and cover with a garden rake and if the soil is dry it should be well firmed over the sets; 380 to 480 lbs. of sets required for an acre.

All Onion Sets shipped at purchaser's expense except where quoted postpaid.



A Safe Method of Shipping Onion Sets.



Northrup, King & Co.'s Sweet Marrow Parsnip.

PARSNIP

Culture. Work the soil very deep and pulverize the surface thoroughly. Sow the seed in early spring, $\frac{3}{4}$ of an inch deep, in rows 12 to 18 inches apart.

As soon as the young plants appear, cultivate and hand weed them, and when 3 inches high thin to 6 inches apart in the row.

Cultivate sufficiently to keep the soil loose throughout the season. Freezing improves the quality of parsnips for table use, so it is customary to take up in the fall when the ground begins to freeze what will be needed for winter use, leaving the remainder to winter over in the ground, or better still, pitting them as is often done with other roots so that access may be had to them at any time.

One oz. of seed for 200 ft. of row; 5 lbs. seed required for an acre.

1135. Northrup, King and Co.'s Sweet Marrow Parsnip. (Sold only in sealed packages.) This fine new parsnip of English origin is offered with full confidence that it will become a prime favorite with all who use it. It is very fine grained and exceedingly sweet, while the peculiar "parsnip" flavor is fully preserved. The roots are unusually smooth and attractive in appearance. The best of all parsnips for the private or market garden. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 85c.



1140. Guernsey. (Improved Half Long.) A greatly improved strain. The roots do not grow so long as the Hollow Crown, but are of greater diameter and more easily gathered. It is a very heavy cropper. The roots are very smooth; the flesh is fine grained, of most excellent quality. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

1145. Improved Hollow Crown Parsnip. Our stock of this old time favorite is very smooth and fine. None better anywhere at any price. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

Best of Satisfaction.

All seeds received from you gave the best of satisfaction, especially the Sweet Marrow Parsnip and your Sterling Beet.

(MRS.) MARY MILLS, Perry, Iowa.

PARSLEY

Culture. Sow seed in shallow drills in the early spring for border or in rows 12 to 18 inches apart; and thin the plants to 4 inches.

Cultivation should be frequent and weeds kept removed.

One oz. of seed will sow 150 feet of row; 6 lbs. of seed required for an acre.

1150. Dark Moss Curled.

The leaves are of an extra dark green color. It is very productive, and on account of the densely curled character of its leaves a quantity can be gathered in a short time. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

1155. Double Curled.

Fine, dwarf, crimped leaves. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

1160. Extra Curled or Emerald Dwarf, ley. This is a most beautiful variety. The moss-like leaves, of a handsome bright green color, are finely curled. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

1165. Fern Leaved. This is most exquisite in form and color—invaluable as a garnishing plant, and suited for mixing with dwarf ornamental foliage plants in the flower garden. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

1170. Plain, or Single Parsley. Leaves flat, deeply cut but not curled.

It is very dark green, is hardy and of excellent flavor, and for these merits is often preferred. It is used more for flavoring while the curled sorts are used for garnishing. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

1175. Rooted, or Hamburg Parsley. The edible portion is the fleshy root, which resembles a small parsnip, and is esteemed for flavoring soups, stews, etc. The flesh is white, a little dry with the flavor of Celeriac. The foliage is the same as the plain parsley. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

Cannot Praise It Too Highly.

I have always found your garden and flower seeds thoroughly reliable, quick to germinate, and with proper care have produced fine vegetables and flowers. This is especially true of the Parsley. It is the best I ever had. I cannot praise it too highly. DOROTHY BENN, Iowa.



Dark Moss Curled Parsley.



Turnip Rooted Parsley

PEAS

HARDY, NORTHERN GROWN STOCK.

Our Peas are Northern Grown. They are produced at an altitude of 5000 feet or more, making them the earliest, hardiest and most productive peas obtainable. In addition, the localities where they are raised are free from insects and other damaging pests. For many years we have made a specialty of Peas and now grow thousands of acres where a few years ago we grew hundreds. Much skill and knowledge is required to properly grow Seed Peas and we employ experts of long experience to handle our crops. Our peas are carefully grown, kept true to type, are bright, handsome, sound and of strong germination.

Those wishing to purchase large lots of peas should write us for special prices, stating varieties wanted and quantities of each. We have an immense trade in Peas, extending over the entire United States and while present stocks are large, they may not be adequate to the demands made upon them. For that reason, we urge early orders to avoid disappointment on the part of our customers.

Round seeded varieties weigh 60 lbs. per bushel, wrinkled sorts, 56 lbs. per bushel.

Prices. At the following prices on Peas, packets and quarter pounds are sent prepaid, all larger quantities by express or freight at purchaser's expense. If wanted by parcel post add postage at rates on page one.

Culture for Garden Peas. Sow seed 2 to 4 inches deep in rich soil very early in the spring and for a succession put in varieties that mature at different periods, or if dwarfs only are desired, sow a few rows every 10 days throughout the season. For hand cultivation sow in rows 15 inches apart, but if grown on a large scale it is best to sow in rows from 2 to 3 feet apart and cultivate them with a horse.

Tall growing peas may be sown broadcast to advantage upon very clean soil or new breaking. They may be supported with a woven wire fence or poultry netting. Sow in double rows eight inches apart and stretch the wire support between the rows. Fasten securely at each end with posts using stakes between the posts.

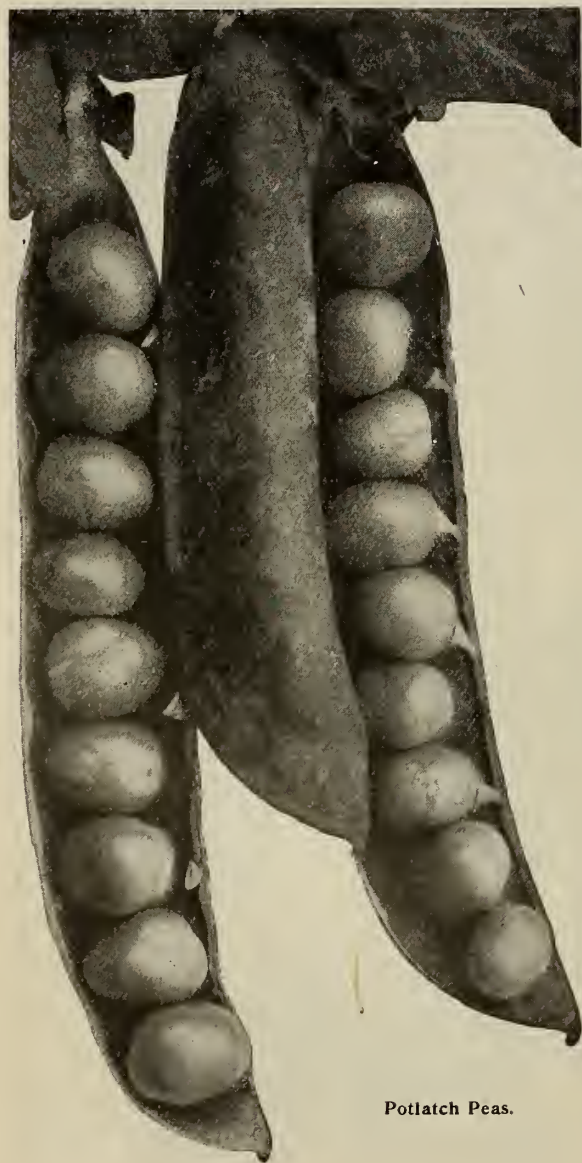
Two lbs. of seed will plant 100 ft. of row; 115 to 140 lbs. of seed required an acre in drills, and if broadcast 175 lbs.

SIX UP-TO-DATE VARIETIES OF GENUINE MERIT

They Should be in Every Garden.

Great advances have been made in recent years in the quality of garden peas. Anyone who has not tried some of the newer varieties can hardly appreciate how delicious these improved sorts are. Plant these six varieties and be convinced.

1352. Alderman. This is a very large podded pea, very robust and vigorous, producing pods of the largest size. The pods are even larger and longer than the average large podded sorts, and are well filled with large peas of most excellent flavor. In habit, the vines are strong and branching, bearing rich, deep-green, straight, handsome pods averaging $4\frac{1}{2}$ to 5 inches in length, pointed at the end. This variety belongs to the tall growing main crop of peas. The vines are from $3\frac{1}{2}$ to 4 feet in height. A point of superiority which must not be overlooked is the unusual flavor and quality of the peas. As is true of most wrinkled varieties they are delicious, but the Alderman is of a quality surpassing many of the others. Also a good sort for shipping. Be sure to include Alderman Peas in your order. Pkt., 5c; $\frac{1}{4}$ lb., 15c; lb., 25c; 5 lbs., \$1.00; 10 lbs., \$1.80; 25 lbs., \$3.25; 50 lbs., \$6.25; 100 lbs., \$12.00.



Potlatch Peas.

1304. Dwarf Defiance.

Grows about 2 feet high and matures an abundance of large, dark green pods about mid-season. In production it compares favorably with the taller, later varieties. The peas are large and of splendid quality, sweet and of fine flavor. Pkt., 5c; $\frac{1}{4}$ lb., 15c; lb., 25c; 5 lbs., \$1.00; 10 lbs., \$1.80; 25 lbs., \$3.25; 50 lbs., \$6.25; 100 lbs., \$12.00.

1317. Laxtonian.

A new first early pea of unexcelled value. It is not only early but is of splendid quality and unusually productive. Although it is a dwarf sort, growing only 15 to 18 inches in height, it excels in yield and equals in size of pod, the Gradus. The pods are deep bluish-green, pointed at the end, generally borne singly and measure 4 to $4\frac{1}{2}$ inches in length. The peas number 7 to 10 to the pod, are large in size and of delicious flavor. The vines are vigorous in growth, deep green in color and require no support. Pkt., 5c; $\frac{1}{4}$ lb., 15c; lb., 25c; 5 lbs., \$1.15; 10 lbs., \$2.00; 25 lbs., \$3.75; 50 lbs., \$7.25; 100 lbs., \$14.00.

1338. Little Marvel.

An extremely valuable variety, especially suited to small home gardens, and is also a splendid variety for early market gardening.

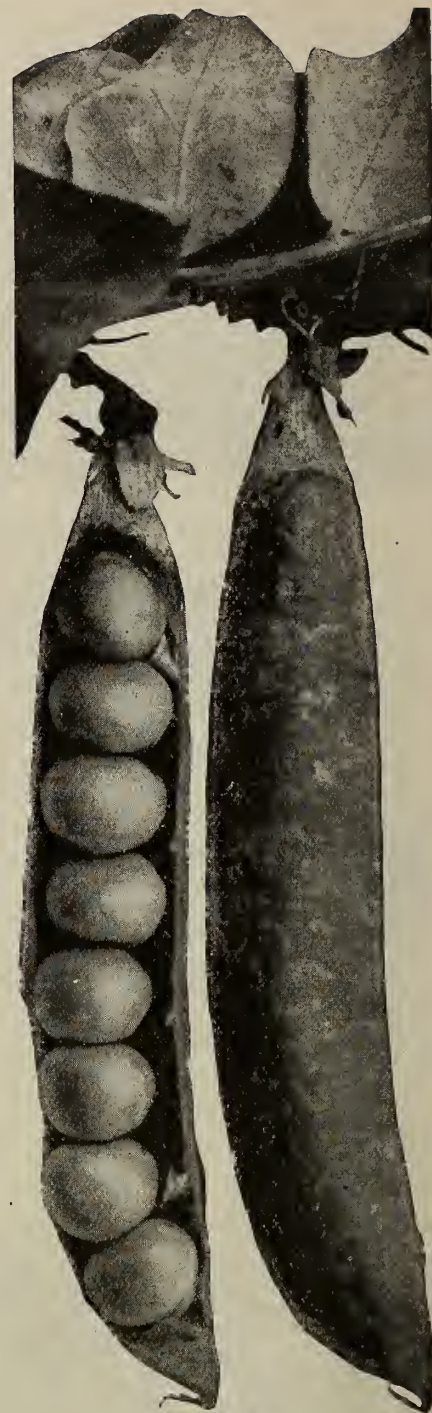
It matures very early and produces large crops. The vines grow about 15 to 18 inches in height. The pods are dark green, fair sized, produced in pairs and are closely filled with seven to eight peas of extra fine flavor. Pkt., 5c; $\frac{1}{4}$ lb., 15c; lb., 25c; 5 lbs., \$1.15; 10 lbs., \$2.00; 25 lbs., \$3.75; 50 lbs., \$7.25; 100 lbs., \$14.00.

1275. Potlatch.

A fine, new variety of great merit. The vines are vigorous, growing 15 to 18 inches high, with dark green foliage. The long pods are a rich, dark green in color, often measuring six inches in length, with 8 to 9 enormous peas in a pod. The vines are sturdy and the pods are borne in pairs. It is wonderfully productive and the way the peas shell out is astonishing. Potlatch matures early and is unusually satisfactory to grow. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 20c; 5 lbs., 85c; 10 lbs., \$1.60; 25 lbs., \$2.75; 50 lbs., \$5.25; 100 lbs., \$10.00.

1342. Richard Seddon.

The pods are deep green, crowded with from 7 to 9 large peas of very fine color and flavor. Grows from 16 to 20 inches in height. An extremely early type, maturing only a week later than the Alaska, when sown at the same time. A splendid all around early variety. On account of its immense productivity, evenness of maturity, compact well filled pods and excellent color and quality, it is especially desirable for canning purposes. We found many plants in our fields last season bearing 15 to 20 pods, with a total of 100 to 150 large, fully formed, luscious peas to the plant, proving the immense productivity of this variety. Pkt., 5c; $\frac{1}{4}$ lb., 15c; lb., 25c; 5 lbs., \$1.15; 10 lbs., \$2.00; 25 lbs., \$3.75; 50 lbs., \$7.25; 100 lbs., \$14.00.



Alderman Peas.

1915 Collection of Up-To-Date Peas.

One Packet Each, Six Varieties of Merit, 25c, postpaid.
 One-Fourth Pound Each, Six Varieties of Merit, 75c, postpaid.
 One Pound Each, Six Varieties of Merit, \$1.25, by express or freight at purchaser's expense; if wanted by parcel post add postage for 7 lb. package, at rate on page one.

PEAS

EXTRA EARLY ROUND SEEDED VARIETIES.

These sorts are most largely grown by gardeners for the early market. They ripen more uniformly than any other peas and where the stocks have been properly bred and kept rogued, from 75 to 80 per cent of the pods can be stripped from the vine at the first picking, enabling the grower to secure the highest prices. Round seeded varieties are not as sweet as the wrinkled sorts. Round seeded or smooth peas weigh 60 lbs. per bushel. See page 1 regarding prices on Peas.

1280. Northrup, King & Co.'s Summit Extra Early.

(Sold only in sealed packages.) Height 2½ to 3 feet. Seeds white. The "Summit" holds the record as the earliest and most even in maturity of the white seeded varieties. A great favorite with gardeners for early market. The entire profit on the crop sometimes depends on being able to market peas early before the larger and later varieties are ready. Pkt., 5c; ¼ lb., 10c; 1 lb., 20c; 5 lbs., 85c; 10 lbs., \$1.60; 25 lbs., \$2.75; 50 lbs., \$5.25; 100 lbs., \$10.00.

1285. Alaska. Height 2½ feet. Very early and exceedingly uniform in maturing its crop. The vines are very productive, bearing four to seven pods which are filled with medium sized, bright bluish-green peas of good flavor. Pkt., 5c; ¼ lb., 10c; 1 lb., 20c; 5 lbs., 85c; 10 lbs., \$1.60; 25 lbs., \$2.75; 50 lbs., \$5.25; 100 lbs., \$10.00.

1290. First and Best. Height 2½ to 3 feet. Standard, white seeded extra early. Vines are vigorous and hardy, bearing from three to seven pods, each containing from five to seven medium sized peas of good quality. Pkt., 5c; ¼ lb., 10c; 1 lb., 15c; 5 lbs., 70c; 10 lbs., \$1.35; 25 lbs., \$2.50; 50 lbs., \$4.75; 100 lbs., \$9.00.

EXTRA EARLY DWARF WRINKLED VARIETIES.

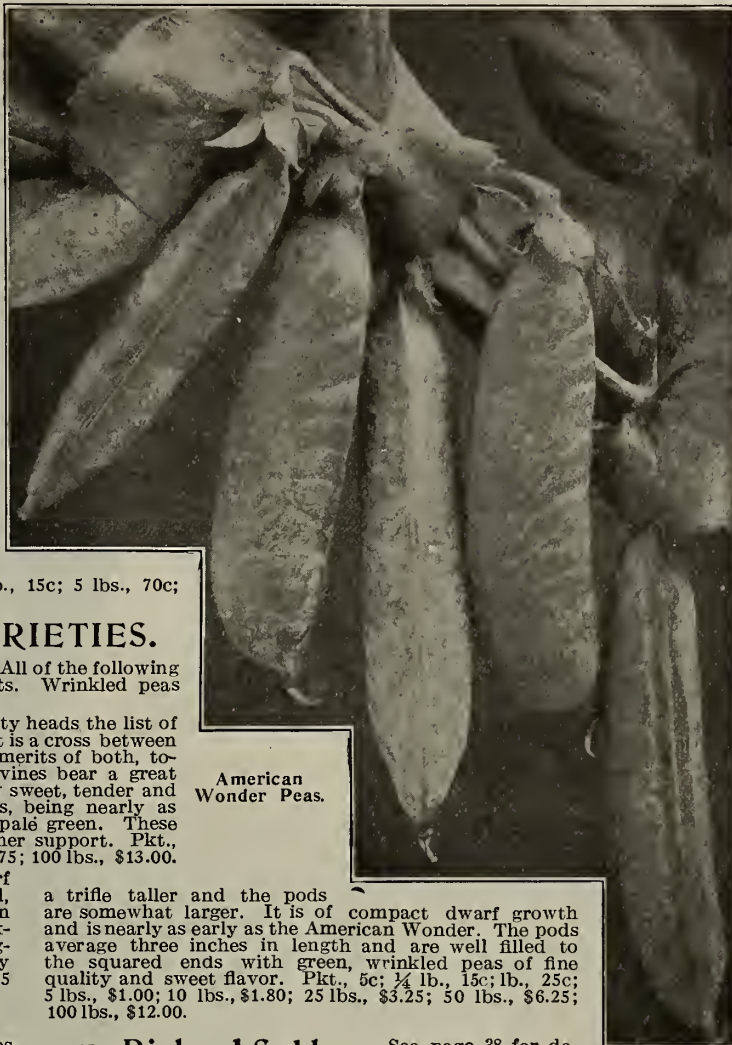
These require no brushing and are in large demand for family use. All of the following sorts are early, being but a few days later than the Round Seeded Sorts. Wrinkled peas weigh 56 lbs. per bushel, according to the Minnesota State Law.

1330. American Wonder. Height 10 inches. This variety heads the list of peas in flavor and quality. It is a cross between the well known Champion of England and the Little Gem and has the merits of both, together with features not found in either of the parent varieties. The vines bear a great abundance of good sized pods containing five to eight large, exceedingly sweet, tender and well flavored peas. This is the earliest of the dwarf, wrinkled varieties, being nearly as early as the smooth sorts. The seed is medium sized, wrinkled and pale green. These peas are especially adapted to family use as they require no brush or other support. Pkt., 5c; ¼ lb., 15c; 1 lb., 25c; 5 lbs., \$1.00; 10 lbs., \$1.80; 25 lbs., \$3.50; 50 lbs., \$6.75; 100 lbs., \$13.00.

1335. Little Gem. Height 16 to 18 inches. The vines are of dwarf growth and produce an abundance of round, well filled pods 2½ to 3 inches long, only three days after the American Wonder. The peas are green, wrinkled, of sweet delicious flavor and excellent quality. One of the best for family use. It remains fit for use longer than the American Wonder and Nott's Excelsior, and thought by many to be sweeter. Pkt., 5c; ¼ lb., 15c; 1 lb., 25c; 5 lbs., \$1.00; 10 lbs., \$1.80; 25 lbs., \$3.25; 50 lbs., \$6.25; 100 lbs., \$12.00.

1338. Little Marvel. See page 38 for description and prices.

1340. Nott's Excelsior. Height 14 inches. This sort resembles the American Wonder but grows



American Wonder Peas.

a trifle taller and the pods are somewhat larger. It is of compact dwarf growth and is nearly as early as the American Wonder. The pods average three inches in length and are well filled to the squared ends with green, wrinkled peas of fine quality and sweet flavor. Pkt., 5c; ¼ lb., 15c; 1 lb., 25c; 5 lbs., \$1.00; 10 lbs., \$1.80; 25 lbs., \$3.25; 50 lbs., \$6.25; 100 lbs., \$12.00.

1342. Richard Seddon. See page 38 for description and prices.



Little Gem Peas.

EARLY WRINKLED VARIETIES.

Most of the following sorts are nearly or quite as early as the round seeded extra earlies, but they do not mature so uniformly. This, while making them less desirable for early market purposes, makes them better for family use as they will stand longer in fit condition for the table. They are much sweeter than the round seeded sorts. Wrinkled peas are sold at 56 lbs. per bushel, complying with the Minnesota State Law.

1300. Advancer. Height 2 to 2½ ft. Seeds green, wrinkled. This variety is a great favorite in eastern markets on account of its superior flavor. The pods are broad and long and well filled to the ends. This sort is extensively used by canners on account of its quality and appearance. It is a very productive and satisfactory variety. Pkt., 5c; ¼ lb., 10c; 1 lb., 20c; 5 lbs., 85c; 10 lbs., \$1.60; 25 lbs., \$3.00; 50 lbs., \$5.75; 100 lbs., \$11.00.

1270. Carter's Daisy. (Early Dwarf Telephone.) Dwarf, large podded, needs no brush. The striking features of the Daisy Pea are its large pods and the way in which they

are heaped up in ridges on the short, strong vines. The pods are nearly double the size of American Wonder or Little Gem, and are always well filled with large peas of most excellent quality. The vines are 16 to 18 inches high, and being strong and thrifty require no support, making it an ideal variety for use where brush or stakes are not available. This pea is desirable on account of the fine appearance of the pods, and always finds a ready sale. Pkt., 5c; ¼ lb., 15c; 1 lb., 25c; 5 lbs., \$1.15; 10 lbs., \$2.00; 25 lbs., \$3.75; 50 lbs., \$7.25; 100 lbs., \$14.00.

1302. Dainty. A few years ago we tried out a small quantity of this new variety. It was so satisfactory that we secured some of the seed from which we produced our stock. We grew this splendid sort on our trial grounds several years and found it a superb variety not only for home use, but unexcelled for canning purposes. The vines grow two to two and a half feet high; pods are borne in pairs in great abundance; the peas grow eight to ten in a pod and are very sweet and delicious. Pkt., 5c; ¼ lb., 15c; 1 lb., 25c; 5 lbs., \$1.15; 10 lbs., \$2.00; 25 lbs., \$3.75; 50 lbs., \$7.25; 100 lbs., \$14.00.

PEAS

EARLY WRINKLED VARIETIES.

1303. Delicatesse. This pea has gained great renown among connoisseurs, who consider it a great delicacy. It is fairly early, vines grow 18 to 24 inches high, are very prolific; pods are long, curved and hang in pairs. Pkt., 5c; $\frac{1}{4}$ lb., 15c; lb., 25c; 5 lbs., \$1.15; 10 lbs., \$2.00; 25 lbs., \$3.75; 50 lbs., \$7.25; 100 lbs., \$14.00.

1304. Dwarf Defiance. See page 38 for description and prices.

1305. Gradus. (Prosperity.) The earliest wrinkled variety. This grand, large podded, early, prolific variety has won the hearts of market gardeners everywhere. The vines are very vigorous and robust, growing to a height of about 3 feet. It is not only an abundant producer, but bears continually throughout the season. It is exceedingly early for a wrinkled variety, being only a day or two later than the earliest, small, smooth sorts. The pods are very large and are invariably well filled with from six to nine sweet, luscious, tender, wrinkled peas of large size and delicious flavor. The peas remain tender for some time after they are large enough to use. Pkt., 5c; $\frac{1}{4}$ lb., 15c; lb., 25c; 5 lbs., \$1.15; 10 lbs., \$2.00; 25 lbs., \$3.75; 50 lbs., \$7.25; 100 lbs., \$14.00.

1310. Honey Sweets. The strong, stiff vines grow from 12 to 15 inches high and require no brush or other support. The pods are similar in shape to the American Wonder but are broader and longer and are borne in greater abundance, the vine being fairly loaded with pods. They are two or three days later than the Wonders but the pods contain more peas, there being on the average 7 or 8 in each. In flavor they are excellent, sweet as honey, rich and delicious. This is a splendid sort for both home and market use. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 15c; 5 lbs., 70c; 10 lbs., \$1.35; 25 lbs., \$2.50; 50 lbs., \$4.75; 100 lbs., \$9.00.

1315. Horsford's Market Garden. Height 2 to 2 $\frac{1}{2}$ ft. Seeds green, wrinkled. In all respects very similar to the Advancer pea, but an improvement on that variety in point of productiveness. Flavor very fine. The peas are rather smaller than the Advancer, but are fully equal in other respects. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 20c; 5 lbs., 85c; 10 lbs., \$1.60; 25 lbs., \$3.00; 50 lbs., \$5.75; 100 lbs., \$11.00.

1317. Laxtonian. See page 38 for description and prices.

1320. Surprise. (Eclipse.) Height 1 $\frac{1}{2}$ to 2 feet. The vines need no brushing or support. Seeds green, wrinkled. Ripens as early as the smooth, round seeded, extra earlies and is much sweeter. The pods are well filled, containing six or seven peas of fine quality. The peas are not so large as the American Wonder, but Surprise is more productive and much earlier. It is the very earliest green wrinkled sort and an excellent variety for both the market and home garden. Pkt., 5c; $\frac{1}{4}$ lb., 15c; lb., 25c; 5 lbs., \$1.15; 10 lbs., \$2.00; 25 lbs., \$3.75; 50 lbs., \$7.25; 100 lbs., \$14.00.

1325. Thomas Laxton. Large podded, extra early pea. This fine early pea was raised by crossing Gradus with the Alaska. In earliness the Thomas Laxton is only two or three days behind the Alaska, but the pods are very much larger, containing on the average seven or eight large, sweet, wrinkled peas of the very richest flavor. The vines attain a height of from three to three and one-half feet. It is of harder constitution than the Gradus, and is earlier and of darker colored pod. In flavor this pea is unsurpassed. Pkt., 5c; $\frac{1}{4}$ lb., 15c; lb., 25c; 5 lbs., \$1.15; 10 lbs., \$2.00; 25 lbs., \$3.75; 50 lbs., \$7.25; 100 lbs., \$14.00.

MAIN CROP VARIETIES.

Planted at the same time as the extra earlies or dwarf varieties, these come into bearing when others are gone. For the most part they stand a long time fit for table use, and as a rule they are, except when noted, sweeter than the early sorts. The pods are large and they stand longer in fit condition for use. Wrinkled peas are sold at 56 lbs. per bushel in compliance with the Minnesota State Law.

1350. Abundance. Height 2 to 2 $\frac{1}{2}$ feet, seeds green, wrinkled. This is a heavy yielding variety and is a capital sort for family use, as in addition to its yielding capacity it possesses great sweetness and general fine table qualities. The pods are round, 3 to 3 $\frac{1}{2}$ inches long and well filled with from 6 to 8 peas. It stands fit for use a long time. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 20c; 5 lbs., 85c; 10 lbs., \$1.60; 25 lbs., \$3.00; 50 lbs., \$5.75; 100 lbs., \$11.00.

1352. Alderman. See page 38 for description and prices.

1360. Champion of England. 4 to 5 feet in height. This has been considered for a long time the standard main crop or late pea for summer use. From this variety has sprung the whole race of green wrinkled peas. The vines are very vigorous and productive, bearing an abundance of large, well-filled pods. The peas are light green, wrinkled, of fine quality and delicious flavor. Hardly any pea is sweeter than this. Pkt., 5c; $\frac{1}{4}$ lb., 15c; lb., 25c; 5 lbs., \$1.00; 10 lbs., \$1.80; 25 lbs., \$3.25; 50 lbs., \$6.25; 100 lbs., \$12.00.

1265. Colossus. New, sweet wrinkled, mammoth podded pea. This splendid pea is of the same large podded type as the Telephone, but the pods are larger and the peas sweeter. Excelling, as it does, in these particulars the well known sort mentioned, the Colossus Pea surpasses all other large-podded varieties in another particular, that of productiveness. In other words, a pint of Colossus Pea pods will yield as many shelled peas as a quart of most other sorts; a bushel as many as two bushels. Quality is always to be preferred to quantity, but a pea which will give better quality and larger quantity is the pea to plant; that pea is the Colossus. We urge early orders, and that at least a small quantity of these peas be included with every order, as far as possible. Pkt., 5c; $\frac{1}{4}$ lb., 15c; lb., 25c; 5 lbs., \$1.15; 10 lbs., \$2.00; 25 lbs., \$3.75; 50 lbs., \$7.25; 100 lbs., \$14.00.

1362. Duke of Albany. Resembles the Telephone in appearance, but the vine is not quite so tall, being 2 $\frac{1}{2}$ to 3 feet in height. The pods are larger than the Telephone and produced more abundantly. They measure 4 to 4 $\frac{1}{2}$ inches long and are light green in color. Peas are light green and very much wrinkled. Pkt., 5c; $\frac{1}{4}$ lb., 15c; lb., 25c; 5 lbs., \$1.00; 10 lbs., \$1.80; 25 lbs., \$3.50; 50 lbs., \$6.75; 100 lbs., \$13.00.



Gradus Peas.

1370. Everbearing. Height 2 $\frac{1}{2}$ to 3 feet. As the name indicates is very prolific. It is probably the best sort for late summer and autumn use. The broad pods, which are of a nice green color, average three inches in length. The peas are very large, green, wrinkled and of excellent quality. They cook very quickly, are tender and of superior flavor. Excellent for family use. Pkt., 5c; $\frac{1}{4}$ lb., 15c; lb., 25c; 5 lbs., \$1.00; 10 lbs., \$1.80; 25 lbs., \$3.25; 50 lbs., \$6.25; 100 lbs., \$12.00.

1372. Gladstone. Of strong and robust growth. Plants remain healthy for a long time during drought. Vines grow two to three feet high and yield an abundance of long, curved, pointed pods. Each pod contains seven to nine peas of splendid flavor. Pkt., 5c; $\frac{1}{4}$ lb., 15c; lb., 25c; 5 lbs., \$1.00; 10 lbs., \$1.80; 25 lbs., \$3.50; 50 lbs., \$6.75; 100 lbs., \$13.00.

1275. Potlatch. See page 38 for description and prices.

1375. Stratagem. Height 20 inches. The foliage is large and the vines strong and robust, requiring no support. It is very prolific and bears many very large, well filled pods containing large, dark green, wrinkled peas of rich, sweet flavor. Our stock is very fine and of first-class quality. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 20c; 5 lbs., 85c; 10 lbs., \$1.60; 25 lbs., \$3.00; 50 lbs., \$5.75; 100 lbs., \$11.00.

Please note that at these prices on peas, pkts. and quarter lbs. are prepaid but all larger quantities are sent at purchaser's expense. If wanted by parcel post add postage at rates on page one.

The varieties of peas we offer are those which have been demonstrated by actual trials on our grounds to be adapted to growing in the North. In addition to our own seed peas we annually test out many varieties from all sections of the world, to discover, if possible, new strains or varieties worthy of introduction. We carefully test every lot of peas for germination before they leave our hands. Peas of low vitality are not permitted to go out of our house.

Book on Peas and Pea Culture. By Glenn C. Sevey. A very complete book on this subject, including garden peas, field peas and sweet peas. One chapter deals with peas for canning purposes. A thoroughly up-to-date and interesting book. 120 pages, cloth binding. Price, 50c, (post paid, 55c).

PEAS MAIN CROP VARIETIES.

1260. Teddy Roosevelt.

A Giant Podded Main Crop Pea.

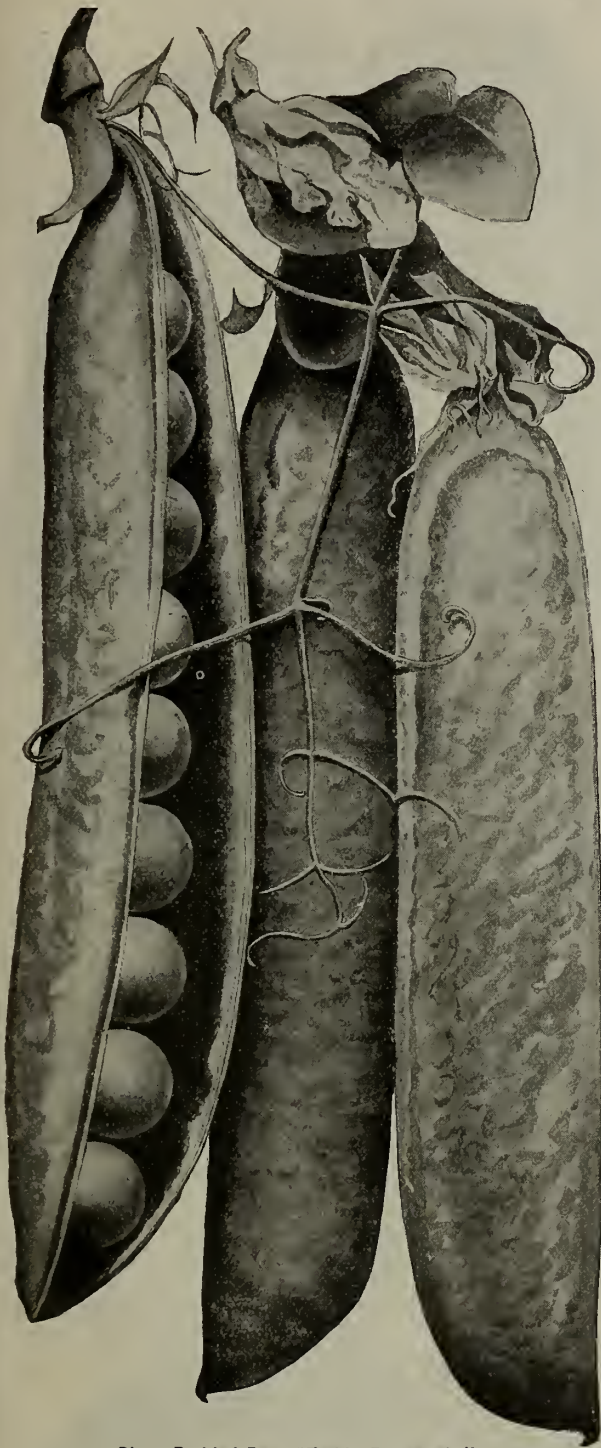
The largest "podder," surest "cropper" and heaviest "yielder" of all the main crop sorts. The Telephone and Stratagem were the first large-podded peas to be introduced. Naturally they created a sensation because they were advertised widely, and are at present the most largely used in America of any of the large-podded varieties. They have, however, one serious defect; the pods contain very few peas.

This fault has been remedied in some of the later introductions, and notably so in the Teddy Roosevelt. This grand pea resembles the Telephone in color of pod and foliage, and in habit of growth; but the pods are larger and contain more peas. A bushel of pods will shell out nearly twice as many peas as the Telephone. The vines are enormously productive, being completely covered with immense long pods, well filled with from 8 to 9 large peas of the richest flavor. This variety grows from 4 to 5 feet high and, as an abundant cropper, is superior to all other sorts.

Nothing in the long line of peas excels the Teddy Roosevelt in richness, sweetness and flavor, and it ought not take a gardener long to figure out that a bushel of pods that will give as many peas as two bushels of other varieties is the kind to grow. The demand is so great every year for Teddy Roosevelt Peas that our stock is usually exhausted early in the season. Pkt., 5c; $\frac{1}{4}$ lb., 15c; lb., 25c; 5 lbs., \$1.00, 10 lbs., \$1.80; 25 lbs., \$3.25; 50 lbs., \$6.25; 100 lbs., \$12.00.

1385. Telephone. This is now the leading pea with market gardeners, as it is in all particulars a market garden variety. It comes into bearing fairly early, yields abundant crops of large, fine appearing pods and peas are sweet and luscious. This variety meets with the ready approval of buyers, when placed on sale and is therefore a popular sort with pea growers. It is a great cropper, continues long in bearing, and fills the basket quickly. The vines grow about $3\frac{1}{2}$ to 4 feet in height, are very vigorous and strong and have large, coarse, light colored leaves. Each vine bears on an average seven to ten pods, which are ready for picking in about 65 days. The immense pods are straight, and of fine appearance, and contain eight to nine large, wrinkled peas, closely packed, tender, sweet and of exquisite flavor. The seed we offer has been carefully selected and is very prolific and will please all who grow this variety this season. Pkt., 5c; $\frac{1}{4}$ lb., 15c; lb., 25c; 5 lbs., \$1.00; 10 lbs., \$1.80; 25 lbs., \$3.25; 50 lbs., \$6.25; 100 lbs., \$12.00.

1390. White Marrowfat. Height $3\frac{1}{2}$ feet. Grown on account of the great quantities of pods which it bears and for canning purposes. The vines are of strong, sturdy growth but mature the pods quite late. The large, cylindrical, light colored pods are well filled with round, smooth, light yellow peas of somewhat dry and mealy quality. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 15c; 5 lbs., 65c; 10 lbs., \$1.25; 25 lbs., \$2.15; 50 lbs., \$4.00; 100 lbs., \$7.50.



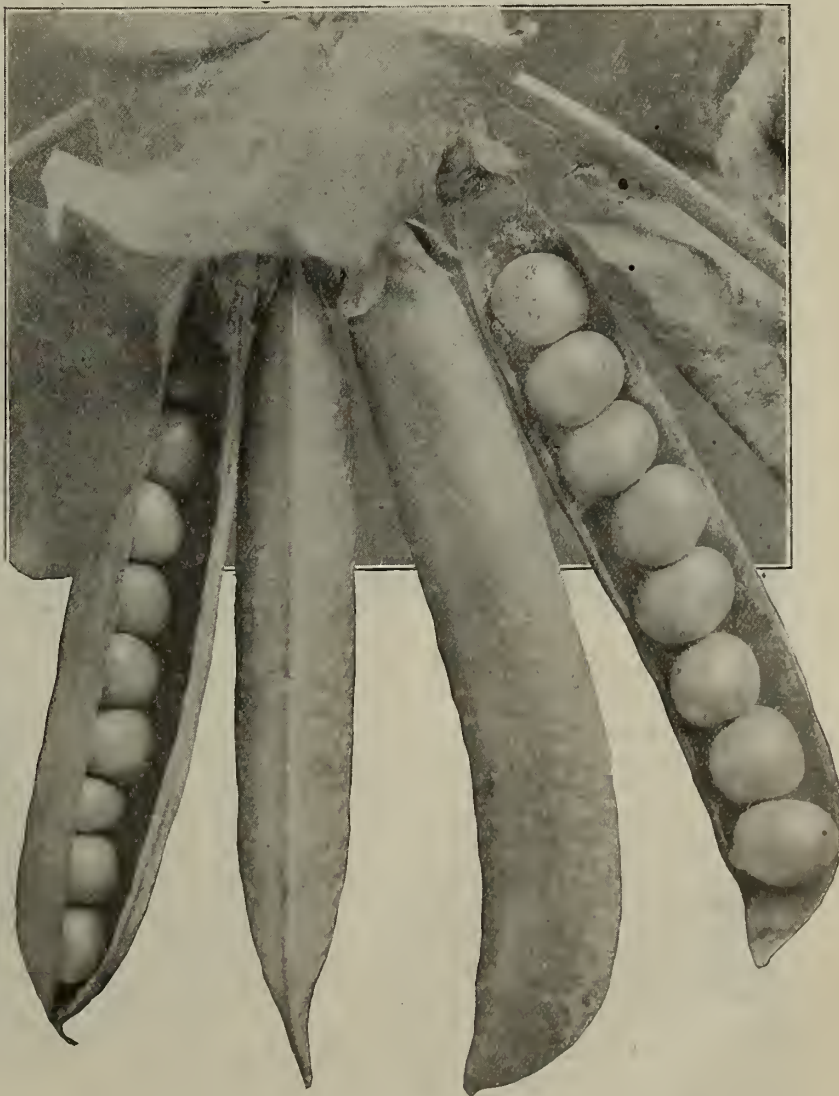
Giant Podded Pea, "Teddy Roosevelt."

1395. Yorkshire Hero. (Big Gem.) Height, $2\frac{1}{2}$ feet. The stout, close jointed vines are very productive, being thickly hung with round, medium sized, well filled pods about 3 inches long. The large yellowish-green peas are wrinkled and remain fit for use longer than most sorts. They are sweet and tender and never become so hard as some varieties. The quality is very fine and for those who want a rich marrow-like pea this variety is unexcelled. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 20c; 5 lbs., 85c; 10 lbs., \$1.60; 25 lbs., \$3.00; 50 lbs., \$5.75; 100 lbs., \$11.00.

1400. Dwarf Gray Sugar. This is an edible podded variety. Vines grow only 15 to 18 inches in height, with purplish blossoms. Sugar peas are not shelled, but pods are cooked same as string beans. Pkt., 5c; $\frac{1}{4}$ lb., 15c; lb., 25c; 5 lbs., \$1.00; 10 lbs., \$1.80; 25 lbs., \$3.25; 50 lbs., \$6.25; 100 lbs., \$12.00.

1402. Mammoth Melting Sugar. This is another of the edible podded varieties. The pods are picked when the peas are only half developed and at that stage there is no stringiness, but are sweet, brittle and appetizing. This variety is quite late, growing 4 to 5 feet high and bearing large pods 4 to $4\frac{1}{2}$ inches long, often curved or twisted. Sugar Peas are usually very scarce, but we have a limited stock of fine quality to offer this year. Pkt., 5c; $\frac{1}{4}$ lb., 15c; lb., 25c; 5 lbs., \$1.15; 10 lbs., \$2.00; 25 lbs., \$3.75; 50 lbs., \$7.25; 100 lbs., \$14.00.

Please refer to page one for postage rates on Peas.



Telephone Peas.

PEPPER

Culture. Plant seed $\frac{1}{2}$ inch deep in the hot-bed in March, or in boxes in the house, set in rows about $1\frac{1}{2}$ feet apart each way in the garden about corn planting time.

One oz. of seed will produce 1,500 plants.

1180. Chinese Giant. An enormous fruiting variety, double the size of Ruby King, averaging 12 to 15 inches in circumference. Notwithstanding its large size, it is very early and very prolific. Plants are healthy, well branched, about two feet high and carry an enormous load of fruit, often having the appearance of being bunched together. Flesh is thick, tender, mild and sweet, and is unexcelled for salad or stuffed as mangoes. They can be sliced and eaten like tomatoes. When ripe the peppers are a rich, glossy scarlet, making them of unusually fine appearance. Pkt., 10c; oz., 50c; $\frac{1}{4}$ lb., \$1.75.

1185. Golden Dawn. Similar to the Large Bell or Bull Nose, excepting that it is of golden yellow color, and of very sweet and delicate flavor. Pkt., 5c; oz., 35c; $\frac{1}{4}$ lb., \$1.00; lb., \$3.25.

1190. Large Bell or Bull Nose. A large, early, bright red variety, mild in flavor. Desirable for pickling and mangoes when green. Pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., 90c; lb., \$3.00.

1200. Long Red Cayenne. A late variety. Pods are small, bright scarlet, cone shaped and pungent. Are as much used for pickling when green as when ripe. Pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., 90c; lb., \$3.00.

1202. Neapolitan. A standard market sort on account of its earliness and productiveness. It is 2 weeks ahead of Bull Nose. The large fruits are light green with thick, mild flesh. As they ripen they turn red. Pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., 90c; lb., \$3.00.

1205. Red Cherry. Fruit cherry shaped, small, round, bright red. Largely used for pickles. Pkt., 5c; oz., 35c; $\frac{1}{4}$ lb., \$1.00; lb., \$3.50.

1210. Red Chili. Fruit is small, bright red, very hot and pungent. Plants are very productive. Generally used for making pepper sauce. Pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., 90c; lb., \$3.00.

1225. Ruby King. The most popular large fruited pepper. Very prolific. The pods are a beautiful bright red, 5 to 6 inches long by 3 to 4 inches in diameter. Flesh exceedingly thick, sweet, and so mild that it is often sliced as a salad. Splendid for stuffing as mangoes. Pkt., 5c; oz., 35c; $\frac{1}{4}$ lb., \$1.00; lb., \$3.25.

1230. Sweet Mountain. Similar to Bull Nose, though usually larger in size and longer, of very mild flavor. Much used for mangoes. Pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., 90c; lb., \$2.75.

PUMPKIN

A splendid fall feed for dairy cows; for hogs in the first stages of fattening they are useful either fresh or cooked with meal.



Connecticut Field Pumpkin.

1240. Connecticut Field. An immensely productive, large, orange-colored, field pumpkin, usually grown for stock feeding, but it also makes good pies. Pkt., 5c; oz., 10c; $\frac{1}{2}$ lb., 25c; lb., 50c.

1250. Japanese Pie. A crook neck variety. Early. Seeds are marked very curiously. Flesh deep yellow of fine quality. Keeps well. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., 95c.

1255. Large Cheese or Kentucky Field. Large, round, flattened, hardy and productive. About two feet in diameter. A fine keeper. Thick flesh of extra fine quality. A fine sort for family and market use. It is also grown quite extensively for stock feeding. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 50c.



1235. Northrup, King & Co.'s Mammoth Prize. (Sold only in sealed packages.) The largest pumpkin grown. Has weighed as high as 225 pounds. A prize winner. The flesh is fine grained and the quality is excellent. The flesh and skin are of a bright, golden yellow color. Notwithstanding its large size it is a fine variety for pies and is a splendid keeper. If you wish to see just how large a pumpkin you can grow, try this variety. Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 50c; lb., \$1.60.

1237. Winter Luxury. A splendid pie pumpkin, small, round, about ten inches in diameter, skin finely netted and beautiful golden-russet. The flesh is thick, sweet, tender, of fine flavor, and deep golden in color. The vines are healthy and productive and the pumpkins keep well during the winter. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.



Chinese Giant Pepper.

1245. Early Sugar or Pie Pumpkin.

Small, round, flattened, prolific, deep orange yellow. Flesh fine grained, sweet and of finest quality. A good keeper. One of the best for pies. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

Pumpkin Culture. For seed sown with corn, plant only one row in five, which, when the vines begin to run, may be omitted in cultivation and thus the plants will not be injured. Use a dibber and plant three to five seeds in every third hill of corn. Plant as a single crop in hills eight feet apart each way. Cultivate with a section of the harrow. Use paris green and land plaster or wood ashes to control the striped squash bugs. When well established thin to four plants in each hill.

One oz. of seed will make 25 hills; 4 lbs. seed required for an acre.

All flower and vegetable seeds sent prepaid except where noted

We have used your seeds and have had very good success with them, especially with the Pie Pumpkin.
J. R. FARNHAM,
Mafeld, S. D.

Have used your seeds for five years with unvarying success. The Mammoth Prize Pumpkins grow to enormous size—the envy of all beholders.
(MRS.) J. W. HASTIE,
Mt. Vernon, Wash.



Early Sugar or Pie Pumpkin

NORTHROP, KING & CO.'S SEED POTATOES



Many Carloads of Potatoes are Handled by us Every Season.

The seed potatoes we send out are seed potatoes in every sense that the word Seed should imply. They are not only the best we can supply, but we try to have them the best to be had from any source at any price. To that end they will be hand sorted, selected stock such as anyone will be proud to plant.

New(?) Varieties. There is nothing sold from seed catalogues as in the item of seed potatoes. During the past few years hundreds of alleged new varieties have been introduced and sold at high prices, and yet (stop and think of it) there are not to exceed ten or twelve standard and well known sorts on the market today.

The trouble lies in the abnormal appetite for new potatoes. No bait is more tempting than a new variety, and just so long as this appetite exists it will be administered to. Our list contains no variety that has not made a place for itself.

Our Potatoes Are Grown in the Far North.

Our stock is grown almost exclusively in the Red River Valley, North Dakota. "Red River" stock always commands a premium over potatoes produced elsewhere. No seed potatoes can be compared with those produced in the North, either for vigor and freedom from disease, or for producing and long keeping qualities.

Our seed potatoes are grown for us under contract, especially for seed purposes. We personally instruct our growers as to the best methods of cultivation and harvesting and our own men superintend loading of cars.

Our seed is clean, healthy and free from scab; and in order that the product may be equally so, we urge our customers to treat the seed they plant with Formaldehyde, as the soil may be infected. For price, see page 149.

Our Methods of Shipment. We will ship our potatoes in any way our customers desire, in bags, baskets or barrels. Prices named on this and following pages are based on the use of bags. If desired in barrels, add 10c a bushel to cover the extra cost; if in 1½ bushel baskets, add 15c a bushel. As we sell 60 lbs. of potatoes to the bushel, which is the standard weight, it is necessary to use a larger basket than one bushel. This fact should be noted in comparing quotations which are frequently made per measured bushel, which is several pounds less. We recommend shipping in tight covered 1½ bu. baskets, there being many advantages to this method. 1st., purchaser does not have to pay freight on 20 to 30 lbs. of barrel; 2nd., when shipped in barrels, potatoes are often badly skinned, which does not occur when baskets are used; 3rd., when shipped in bags, they often arrive in damaged condition with the bags torn and part of the contents gone; 4th., baskets are very easily handled; 5th., railway companies use more care in transporting baskets; 6th., baskets are always of use. Less than bushel lots are usually shipped in bags.

Prices. Owing to the fluctuating market and the impossibility of accurately estimating future values at the time of going to press with this catalogue, all prices are subject strictly to market changes. At the time of mailing we enclose a Red Figure Price List which will give latest values. Those who do not care to order seed potatoes until later should send for Red Figure Price List just before ordering. These lists are issued at frequent intervals during the season. We believe it would be wise to order early, not only to secure the advantage of the early price, but to avoid also the possibility of varieties becoming sold out later. Those wishing to try in large quantities should write for special prices, stating varieties and number of bushels wanted.

Date of Shipment. Potatoes will be shipped at any date ordered, but where no special instructions are given to the contrary, we will hold same until in our judgment there will be no danger from freezing.

Northrup, King & Co.'s Extra Early Ohio Potatoes.

Our Own Special Stock.

We consider these to be the earliest, purest and altogether the handsomest stock of Early Ohio Potatoes to be found anywhere. On these points we challenge comparison with stock from any other source. We do not admit that its equal exists among Early Ohio Potatoes. They are grown under conditions that make them cost more than common stock. They are selected with the utmost care and the result is such as to delight everyone who knows and appreciates a good potato.

The Early Ohio Potato is so well and generally known as to require no extended description. We believe it to be more popular than any other variety, which fact is evidenced by the very large demand we have for it. Our sales on it is sort are many cars in excess of the quantity sold of any other one kind. They can be depended to give a uniformly good yield under almost all conditions and soils and produce a tuber of an ideal size for early market use.

Notwithstanding its earliness, this potato keeps well. Our stock in the spring is as sound as a dollar.

The basket of Extra Early Ohio Potatoes in the illustration represents the stock we send out, smooth, uniform and of fine, typical shape. This potato is characterized by pink skin, shallow eyes, blunt ends and a slightly pebbled appearance, peculiar to this variety.

In anticipation of the usual heavy demand we have now in stock a very fine and liberal stock of these excellent potatoes.

Price. Based on placing potatoes in bags, we quote, subject to market changes, ¼ bu., 40c; bu., \$1.20; 10 bu. @ \$1.00 per bu. 100 eyes, by mail postpaid, \$1.00. If desired in barrels, add 10c a bushel to cover extra cost; in 1½ bu. baskets, add 15c a bushel.

The potato market fluctuates; ask for prices when ready to buy.



Northrup, King & Co.'s Extra Early Ohio Potatoes. Note Method of Shipping in Basket.

SEED POTATOES

Rose. This variety has been a great favorite for many years on all markets and many growers still claim that it has never been excelled in quality and productiveness. Potatoes are long in shape, good size and light pink in color at the bud end. They cook mealy and are of the finest flavor. $\frac{1}{4}$ bu., 50c; bu., \$1.50; 10 bu. @ \$1.35 per bu. 100 eyes by mail \$1.00, postpaid.

Booklet on Potato Culture. Valuable for every potato grower. Sent free with orders if requested or mailed for 5c in stamps.

Rose Potato.

Early Triumph. (BLISS.) This variety was introduced many years ago by Mr. B. K. Bliss. The Triumph attained at that time no particular favor, but all of a sudden its virtues became appreciated and the demand for it was so great that it sold readily in carload lots for three times the price of ordinary seed potatoes. There is good reason why the Triumph should be popular. It is from seven to ten days earlier than the Ohio, and that often means a difference of many dollars in the crop. We believe that potato growers will do well to plant liberally of them the coming spring, as there is sure to be an almost unlimited demand for the seed from the Mississippi Valley, where thousands of acres of potatoes are grown each year for the early market. The potato is of good size, squared at the ends. Skin is red, flesh is very white and firm. It is productive, and for several years to come will probably command a higher price among potato buyers than any other sort. $\frac{1}{4}$ bu., 40c; bu., \$1.20; 10 bu. @ \$1.00 per bu. 100 eyes by mail, \$1.00, postpaid.

Rose Potato.

Extra Early Triumph Potato.

Carman No. 3. The Best Main Crop Potato.

The Carman No. 3 is already rivaling in popularity the Burbank, and is undoubtedly a much better potato. Without any exception whatever it is the greatest yielding potato ever introduced. The tubers are borne very close to the plant, a single turn of the fork turning out every potato. It is of a large size and of the shapeliest form. Eyes are few and shallow. It is a perfect keeper, and is not surpassed as a table variety. Skin and flesh of extreme whiteness. It has no hollow heart or any dark parts. We recommend this potato to our customers as being undoubtedly the best of all late sorts. $\frac{1}{4}$ bu., 40c; bu., \$1.20; 10 bu. @ \$1.00 per bu. 100 eyes by mail, postpaid, \$1.00.

Carman No. 3. Potato.

Rural New Yorker No. 2. Originated by the late Elbert C. Carman, and a very distinct and valuable main crop sort. The tubers attain a large size and are of wonderfully smooth skin. The eyes are few, distinct and shallow. It is a very healthy and vigorous variety, as is attested by the growth of vine and solidity of the tubers. $\frac{1}{4}$ bu., 40c; bu., \$1.20; 10 bu. @ \$1.00 per bu. 100 eyes by mail, postpaid, \$1.00.

Peerless. A round white variety with a slightly netted surface. This is very similar to the Rural New Yorker No. 2 but is not so large, being about the size and very much the shape of the Irish Cobbler; the eyes however are not so deep. $\frac{1}{4}$ bu., 40c; bu., \$1.20; 10 bu. @ \$1.00 per bu. 100 eyes by mail, postpaid, \$1.00.

Russet or Netted Burbank. Vines very robust, tubers medium long, smooth with shallow eyes and netted skin, flesh very white and floury; they bake quickly. Scab resistant; a main crop variety and heavy yielder, doing best in a rich soil. $\frac{1}{4}$ bu., 50c; bu., \$1.35; 10 bu. @ \$1.15 per bu. 100 eyes by mail, postpaid, \$1.00.

Rural New Yorker No. 2 Potato.

Burbank. A Standard Late Variety.

Continues in good demand and is more largely used than any other. It is of good size, of fine form and an excellent yielder. The flesh is white, very mealy and of fine flavor and quality. The best potato for baking. This variety is well adapted to heavy soils. $\frac{1}{4}$ bu., 35c; bu., \$1.10; 10 bu. @ 95c per bu. 100 eyes by mail, postpaid, \$1.00.

How We Ship Potatoes.

We will ship potatoes in any way desired by our customers. Prices named herein are based on using bags. If desired in barrels, add 10c a bushel to cover extra cost; if in $1\frac{1}{2}$ bushel baskets, add 15c a bushel.

Potato prices are subject to market changes. Red Figure Price List giving latest values mailed upon request.

Burbank Potato.



Irish Cobbler Potato.

New Hybrid Potato Seed.



Potato Seed Balls. One-third size.

This is seed obtained from the balls like those shown in illustration. Plant this seed to produce an assortment of new and distinct potatoes—of many kinds, colors, shapes, sizes, forms and qualities. Some may be of great value. They require two or three years for complete development. This mixture includes seed from South America, Africa, Europe, Mexico and the United States. Cultural directions on each package. Pkt., 15c, 2 for 25c.

Read these Extracts from Customers' Letters.

I grew 101 Potatoes from one plant of your potato seed. Every plant was a different variety. Mrs. Ellen Keener.
I raised 20 hills from one packet; many kinds and colors; some early, some late. 94 Potatoes from 1 hill. J. H. Skinner.



A Dollar Box of Potato Eyes. (From a Photograph.)

SEED POTATOES

Irish Cobbler. An extra early variety maturing only a few days later than Early Triumph. Cobblers are preferred, however, to the Triumph on account of their color, which is a cream white. The tubers are round and uniform in size and shape. The eyes are strong and well developed and slightly indented. The flesh is white and of fine quality and flavor. $\frac{1}{4}$ bu., 50c; bu., \$1.35; 10 bu. @ \$1.15 per bu. 100 eyes by mail, postpaid, \$1.00.

Early White Albino. This splendid new potato is an exceptionally good yielder and keeper. The potatoes which weigh up to $2\frac{1}{2}$ lbs. are long and rounded. They are about ten days later than Early Ohios and particularly valuable for the early market by reason of their fine shape and early maturity. The skin and flesh are extremely white; the cooking quality is especially fine. Plant this potato early, in good soil and give it proper cultivation for pleasing results at harvest time. $\frac{1}{4}$ bu., 40c; bu., \$1.20; 10 bu. @ \$1.00 per bu. 100 eyes by mail postpaid, \$1.00.

Pingree. This is a main crop potato, named for the late Governor Pingree of Michigan—and pronounced by him the best potato he had ever eaten. It is productive to an extraordinary degree. The tubers are bunched closely in growing, which materially lessens the labor of harvesting. The potato itself is of the size and shape best liked in nearly all markets. The skin is of a bright light russet color. Eyes are few and nearly flush with surface. In quality no potato can surpass it; in fact, in this particular we know of no sort that equals it. Its snowy whiteness when cooked, together with its dry and floury nature, makes it a favorite. $\frac{1}{4}$ bu., 40c; bu., \$1.15; 10 bu. @ \$1.00 per bu. 100 eyes by mail, postpaid, \$1.00.



Early White Albino Potatoes.

POTATO EYES BY MAIL

The Best Way to Secure Planting Seed.

We believe that we are the originators of the system of sending potato eyes by mail. There are many people living in cities or towns who have a small garden and would like to devote a portion of it to potatoes, but do not feel like paying the freight or express charges on a small quantity of seed. The freight alone on a few potatoes necessary to plant this space would amount to as much as we ask for the eyes delivered at your door.

The importance of securing Northern Grown Potatoes should be taken into careful consideration. Our stocks were all grown especially for seed purposes in the Red River Valley, conceded by every one to be the ideal location for the propagation of this tuber. By careful selection we take the very best potatoes, from which the eyes are cut. These are prepared in such a way that they will keep in good condition for a considerable length of time.

There are numerous advantages in procuring potato eyes, which can be briefly summed up.

First—It has been conclusively proven that potatoes cut to single eyes give the largest yield and best results generally.

Second—No freight or express charges to pay, as we pay the postage.

Third—They can be sent without danger of freezing. A customer can secure them in ample time for planting without incurring this risk.

Fourth—By our improved method of preparing the eyes for shipment, they will keep in good condition for a month or more.

Fifth—There are many who would like to try some of our varieties for the first time. By purchasing eyes this can be done at a very slight expense.

Sixth—We guarantee safe arrival, in good condition for growing.

QUANTITY TO PLANT.

If planted in hills allow three or four eyes to each; if in rows, far enough apart to permit cultivation, drop eyes about every eight or ten inches. Cultivate the same as ordinary cut tubers. Eyes are packed in neat boxes, properly and plainly labeled (see engraving) each small box containing 25 eyes. We can furnish all of one variety or several varieties, but no less than 25 eyes of any sort will be put up.

OUR OFFER FOR \$1.00.

We will send to any address, postpaid, 100 Eyes, (25 each) of the following splendid sorts: Northrup, King & Co.'s Extra Early Ohio, Burbank, Extra Early Triumph, Carman No. 3. This is the way to secure your planting stock of new varieties for less than the freight would cost on the whole potatoes. We pay the postage.

Two Bushels from Twenty-five Eyes.

The Pingree potatoes shown in the enclosed photograph were raised from 25 eyes bought from you. The yield was two bushels from the 25 eyes.

JOHN FRIDGEN, Vining, Minn.

RADISH

The Secret of Growing Good Radishes

Consists chiefly in the observance, on the part of the grower, of three points. First, they should be grown on light quick soil. Second, they should be given plenty of water, and last, but not by any means least, the right kind of seed should be sown. Radishes grow very quickly and if not supplied with sufficient moisture are likely to be pithy.

Sow seed $\frac{1}{2}$ inch deep in the early spring in rows 1 foot apart and the more fertile the soil the faster they will grow. For a succession, sow every 10 days throughout the season and stir the soil sufficiently to keep out weeds.

One oz. of seed required for 100 ft. of row; 8 to 10 lbs. of seed will plant one acre.

EARLY ROUND RADISHES.

Northrup, King & Co.'s

1405. Sterling White Tip Radish.

Sold only in Sealed Packages.



After several years' experience in growing many strains of White Tip Radish we gave this particular sort the name "Sterling" because of its fine shape, its uniformity, its handsome appearance, its solidity, its regular and fine markings, its crisp, mild flavor and its superiority in every respect to all other strains of this type of Radish. It is very early and equally desirable for outdoor culture and forcing under glass. When placed on the table it is of particularly fine appearance. In flavor, no other radish excels it, being crisp, sweet, mild and delicate, all that may be desired in a radish. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; $\frac{1}{2}$ lb., 45c; lb., 80c.

1410. Early Deep Scarlet or Non Plus Ultra, Forcing.

This variety has as small a top and is as early as any in cultivation, making it one of the best for forcing under glass. Roots ready to pull may be had in three weeks and they remain fit for use longer than any other early variety. They are small, globular, smooth, very deep red in color; flesh is white, crisp, tender and mild in flavor. May be planted very closely owing to their small tops. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 85c.

1418. Early Scarlet Globe. A selected forcing strain especially adapted for greenhouse and hot-bed culture, but may be grown outdoors also with the best results. The shape is a little longer than round and the color, which it holds long after pulling, is very brilliant and attractive. Has a small top and is very early, being fit to pull as soon as Non Plus Ultra, but is much larger when matured. The flesh is white and tender making it desirable for gardeners whose markets demand a large first early radish. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 65c.

1420. Early Scarlet Turnip, White Tipped. Practically the same as the Rosy Gem, except that it is not quite so early but is used mostly for outdoor culture. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 45c.

1425. Early White Box. Similar to the White Turnip, but attains larger size. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 55c.



Northrup, King & Co.'s Sterling White Tip Radish.

1430. Early White Turnip. A medium sized round variety, grown very largely for summer use. Has a small top and pure white skin. The flesh is waxy, mild and crisp. While generally used for outdoor culture, this makes a good variety for forcing. It takes about 30 days to mature and remains fit for use a long time. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 65c.

1435. Rosy Gem. We have a very clean and beautiful strain of this popular sort. It is extremely early, maturing in 25 days, and is largely used for growing both under glass and outdoors. It is round, bright scarlet and has a handsome white tip. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 80c.

1440. Ruby Pearl. A small turnip-shaped, bright red radish with a pure white tip which includes the tap-root. This variety is more brightly colored than the Scarlet Turnip, White Tipped and will soon rival it in popularity. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 85c.

1445. Sparkler. White tipped radishes are justly popular by reason of their attractive appearance, but the varieties already in existence are either too dull in the ground color or lack a clearly defined white tip.

This quite distinct variety fulfills every requirement in each respect, the color being a rich carmine scarlet with a very pronounced tip of the purest white. The roots even when fully developed are solid, crisp and sweet, and remain fit for use as long as the coarser kinds. It is equally well adapted for forcing in frames or growing in the open ground, for while the leaves are small, they are sufficiently large for bunching. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

1450. Triumph Radish. This is a decidedly unique novelty in radishes. It is very early, maturing about twenty days from the time of sowing. It is globe-shaped, the tops are short, which makes it valuable for growing under glass. The flesh is very crisp, solid and of mild flavor. The ground color is pure white, striped horizontally with bright scarlet. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 85c.

1455. Yellow Ball, or Summer. A fine summer variety, of quick growth, producing crisp, tender radishes even in the hottest weather and for that reason is grown extensively in the South. Roots are uniformly globe-shaped; skin is golden yellow in color and flesh is mild in flavor. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

Book on Vegetable Gardening. By S. B. Green. A complete manual on the growing of vegetables and the arrangement of the home garden. Practical and comprehensive. 252 pages. Price, cloth cover, \$1.00; paper cover, 50c, postpaid.



Early Scarlet Globe Radish.

RADISH

EARLY OLIVE SHAPED RADISHES.

1460. Early Scarlet Olive. A very useful variety. Matures in 25 days; color, bright scarlet; flesh, crisp and tender. Best adapted for main crop. Large pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

1462. Northrup, King & Co.'s Special French Breakfast. (Sold only in sealed packages.) Of all the large number of different strains of radishes grown at our trial grounds this past season, none surpassed in fine quality or appearance, this new variety. It is oblong in shape, has a bright scarlet top and pure white tip. It matures quickly and is sweet, crisp, solid and tender. When offered for sale it quickly attracts the buyer's attention. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

1465. French Breakfast. Regular Strain. A great favorite. Beautiful, bright scarlet, with pure white tip. Oblong in shape, medium size, makes rapid growth. It is a fine table variety on account of its excellent quality and attractive appearance. Fine for open ground or forcing. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 15c; lb., 50c.

1470. White Olive Shaped. Flesh mild and firm. Of very fine quality. Large pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 70c.

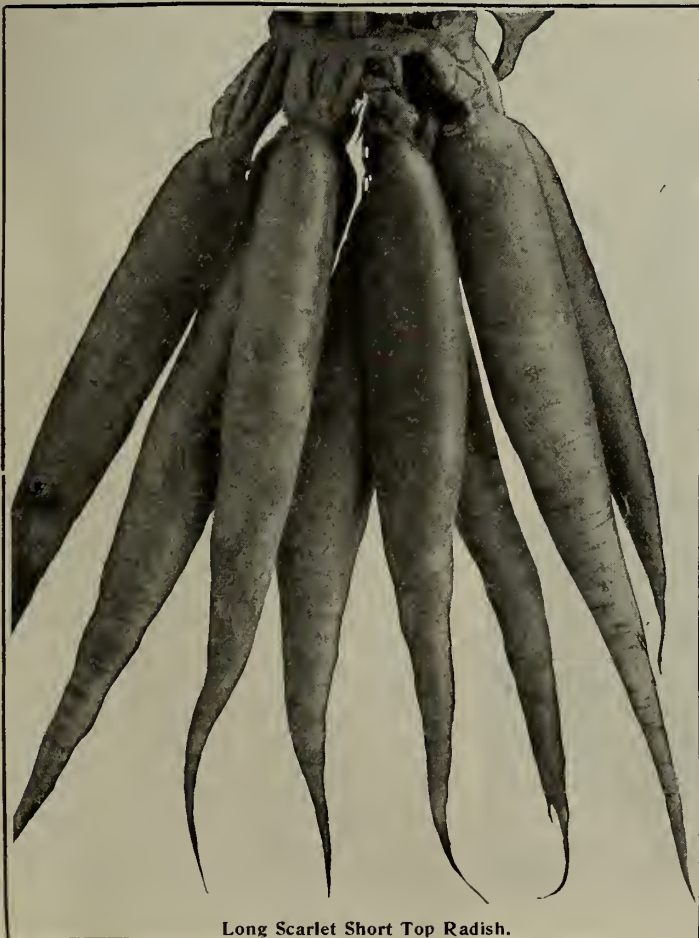
LONG RADISHES.

1475. Chartier or Shepherd. The largest and handsomest summer sort. This variety is ready for the table very early and remains hard and crisp until it reaches a diameter of about an inch and a quarter, thus furnishing good roots for a long time. The color at the top is of a vivid crimson, fading gradually to pure white at the tip. Is delicious in flavor, resists drought effectually. Large pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 15c; lb., 50c.

1480. Glass or Cincinnati Market. In appearance this radish is entirely unique. It is very early, splendid for forcing or open ground. The tops are very small and they may stand close in the row. They grow straight and smooth, from six to seven inches long. The flesh is very tender, crisp and delicious. This is a handsome variety, bright red in color, and remains in good condition for several days. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 60c.

1482. Long Cardinal. A very early variety, fit for use in about 25 days from sowing. It is of a bright red color with white tip. It is especially valuable because of its crisp, tender flesh and fine appearance. It is smooth and uniform and highly colored; the contrast of brightest cardinal with the white tip is both inviting and appetizing. Being early it is very profitable for marketing. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 80c.

1490. Long White Vienna or Lady Finger. Pure white in color, of long tapering shape, very attractive in appearance, sweet, mild and delicious. Matures in 25 days. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 80c.



Long Scarlet Short Top Radish.



White Icicle Radish.

1495. White Icicle. The finest of the early, pure white varieties. Planted in the spring the radishes are ready for pulling in about three weeks from sowing the seed. They are long and slender and clear pure white, making them very attractive when on sale and on the table. It is crisp and tender both when young and until it attains larger size, thus remaining in condition for use for considerable time. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

1485. Long Scarlet Short Top. A standard popular sort. Grows to six inches in length, matures in 25 days and can be used before it is fully grown. The roots grow half out of the ground, are very uniform in shape, smooth and very bright red in color. It remains crisp and tender until fully grown. Excellent either for the market or private garden. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 15c; lb., 50c.

1500. White Strasburg. A largemedium long sort, with heavy shoulders tapering gradually to base. Flesh and skin pure white. Solid, fine quality. Resists drought. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

1505. Wood's Early Frame. An improvement on Long Scarlet. Largely used for forcing and a very popular variety with those who know it. Our stock is fine. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 15c; lb., 50c.

WINTER RADISHES.

The merits of Winter Radishes are little appreciated, probably because they are seldom grown and few people have knowledge of their worth. These grow to large size and keep well for winter and spring use. Sow seed in the middle of June. Include some of these in your order.

1510. California Mammoth White. Pure white, about one foot long and two or three inches through, tapering regularly to tip. The flesh is tender and crisp, keeping well through the winter. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

1515. China Rose. Bright rose color, flesh firm and piquant, cylindrical, or largest at the bottom, tapering abruptly to small top. One of the best for winter use. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 65c.

1520. Long Black Spanish. One of the largest, latest, as well as the hardiest of radishes. Roots of medium size, oblong, black, and flesh is of firm texture. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

1525. Round Black Spanish. Roots round, sometimes top-shaped, three or four inches in diameter; skin black; flesh white. Fine for winter use as the roots keep a long time. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

Book on Asparagus. By F. M. Hexamer. A practical, new treatise on the best methods of raising, cultivating, harvesting, marketing, forcing and canning asparagus. Price, 50c, (postpaid, 55c).

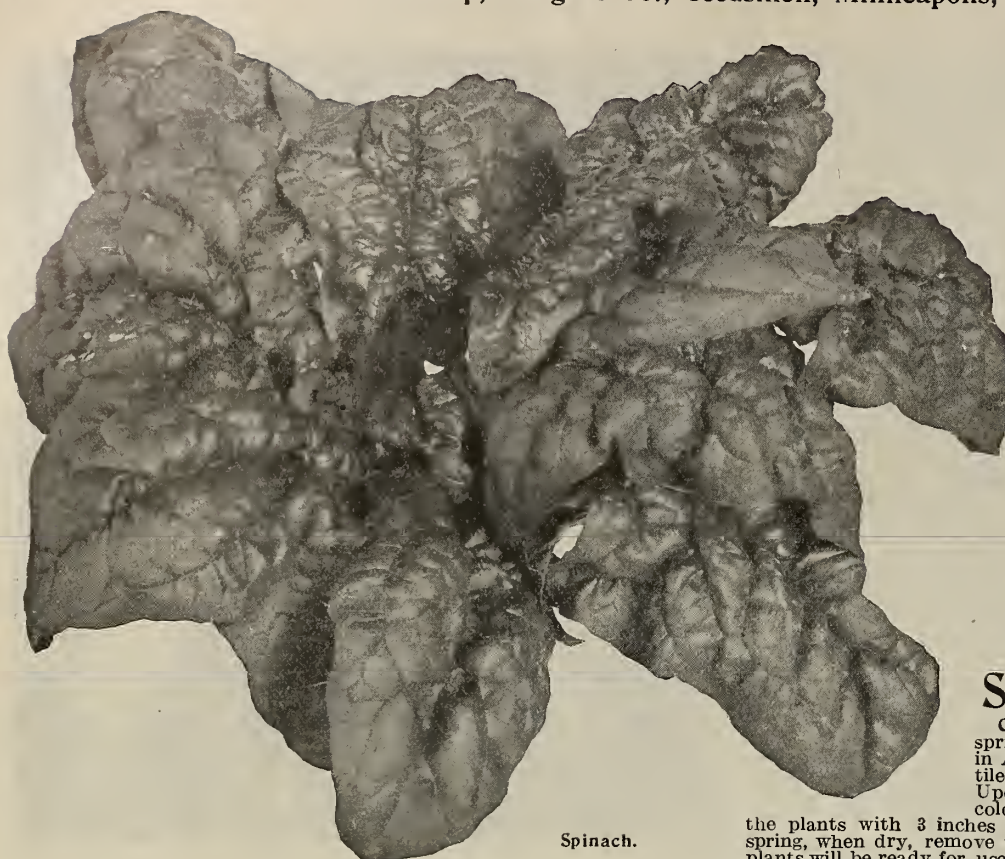
Book on Bean Culture. By Glenn C. Sevey. The only complete authoritative and comprehensive book on the subject. Price, 50c, (postpaid, 55c).

Book on Cabbage, Cauliflower and Allied Vegetables. By C. L. Allen. Gives complete instructions from seed time till harvest, including Brussels Sprouts, Kohl Rabi, Kale, etc. Price, 50c, (postpaid, 55c).

Book on Carrots and Mangels. By J. H. Gregory. How to raise, store, and feed them. Price, 30c, (postpaid, 35c).

Book on The A. B. C. of Potato Culture. By T. B. Terry and A. I. Root. How to grow quantity and quality and other new and valuable information. Price, 50c, (postpaid, 55c).

Notice. All vegetable and flower seeds sent prepaid, except where noted.



Spinach.



Salsify.

RHUBARB SEED

Culture. Sow the seed in cold frame in the spring and as soon as the plants are large enough transplant into rows 1 foot apart each way and cultivate. The following spring, plant out in rows 5 feet apart each way and each spring work into the soil a liberal supply of decomposed stable manure. Rhubarb roots are set out and cultivated as the above and this method gives edible rhubarb in a very short time.

One oz. of seed will sow 75 ft. of row.

1538. Rhubarb Seed. Vigorous and productive. The leaf stalks are very numerous, the longer ones being from 15 to 20 inches in length, and fully one and a half inches wide. The whole plant is nearly 5½ feet in diameter, while the leaves, exclusive of the flower stalks, are about 2½ feet in height. Rhubarb is very highly esteemed for use in pies, tarts, jelly and marmalade and large quantities are sold in all markets every year. It is the first vegetable of the season, and no private garden should be without it. Pkt., 5c; oz., 15c; ¼ lb., 40c; lb., \$1.25.

Rhubarb Roots

The planting of Rhubarb Roots is usually more satisfactory than to attempt to start from seed. Both time and labor are saved where the former method is followed. Roots such as we furnish should be set into well enriched soil at least five feet apart each way. The stalks should not be pulled the first season. The blossom stalks, however, should always be cut back so as not to exhaust the plant by going to seed. Mailing Size. Each, 20c; doz., \$2.00, postpaid. Extra Large. Each, 20c; doz., \$2.00; by express only at purchaser's expense.

SALSIFY or Vegetable Oyster.

Culture. Soil, seeding, culture and storing same as for parsnip. One oz. of seed will sow 60 ft. of row; 10 lbs. of seed required for an acre.

1550. Long White French. The variety most commonly cultivated and considered the best in flavor. The roots are long, white, smooth and when properly cooked form a good substitute for oysters, which they resemble very much in taste. Pkt., 5c; oz., 15c; ¼ lb., 40c; lb., \$1.25.

1555. Sandwich Island. Grows uniformly extra large, averaging fully double the size and weight of the roots of the old variety. Of very superior quality and delicate flavor. Pkt., 5c; oz., 15c; ¼ lb., 50c; lb., \$1.50.

1560. Wisconsin Golden. Large, yellowish, rich, tender and brittle. Pkt., 5c; oz., 25c; ¼ lb., 75c; lb., \$2.50.



Rhubarb.

SPINACH

Culture. For early spring use, sow seed in August in very fertile soil rich in humus. Upon approach of cold weather, cover the plants with 3 inches of straw. In the spring, when dry, remove the litter and the plants will be ready for use in a short time. Sow the seed 1 inch deep in rows a foot apart. For a succession, sow again early in the spring, and every two weeks thereafter. Keep surface soil cultivated lightly.

One oz. will sow 100 ft. of row; 10 to 12 lbs. seed required for an acre.

1565. Bloomsdale or Savoy Leaved. This is the earliest variety. Plant is of upright growth, with narrow, pointed, crinkled leaves. Is very hardy. Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 40c. By express or freight, lb., 30c.

1595. Round Thick Leaved. A rapid growing variety forming clusters of large, very thick, slightly wrinkled leaves. A favorite with market gardeners. Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 40c. By express or freight at purchaser's expense, lb., 30c.

1572. Long Season. An excellent sort, having very dark green, tender, crumpled leaves. It will stand an exceptionally long time without running to seed, and remain in good condition. One of the very best varieties for early spring and successional summer planting. Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 40c. By express or freight, lb., 30c.

1575. Long Standing. This excellent variety comes quickly to maturity and remains in condition for use much longer than other sorts. The leaves are smooth and very dark, rich green. In our estimation the best for the private garden, as it is one of the most popular and profitable with market gardeners. Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 40c. By express or freight, lb., 30c.

1580. Long Standing Prickly. A little later than the leafy sorts, but yields a large quantity of thick and finely colored leaves. It remains in condition fit for use for a long time. Seed is prickly. Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 40c. By express or freight, lb., 30c.

1570. Munsterland Frost Resisting. A hardy winter spinach, standing considerable frost. The hardiest of all varieties. Especially adapted for planting in August and very early September. Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 40c. By express or freight, lb., 30c.

1590. Prickly Winter. A very hardy variety and will withstand severe weather especially well. It is a sort used largely for fall sowing. Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 40c. By express or freight at purchaser's expense, lb., 30c.

1585. New Zealand. The stems and leaves are soft, thick, fleshy and crystalline in appearance. When started early in the spring, the plants will resist heat and make strong growth during the summer. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00.

Special prices on large quantities of Spinach.

SQUASH WINTER VARIETIES.

Culture. Plant seed in extra fertile soil in the spring as soon as danger of frost is past. The vining varieties should be planted in hills 8 or 10 feet apart each way, and the bush varieties from 4 to 5 feet. Place 10 seeds in a hill and cover with an inch of soil.

When the plants are well started thin out and cultivate.

One oz. of seed required for 25 hills. For running varieties, $3\frac{1}{2}$ to 4 lbs. seed required per acre. Bush varieties require 6 lbs. of seed per acre.

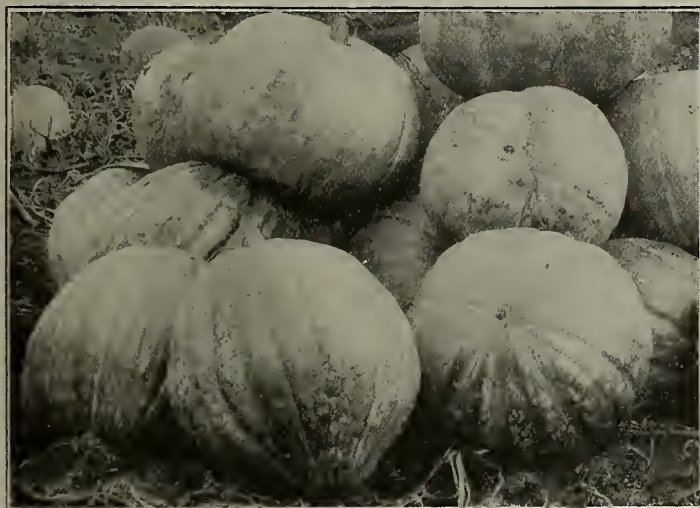
1605. Northrup, King & Co.'s Improved Hubbard.



(Sold only in sealed packages.) Our own strain of Hubbard Squash is the finest grown. The soil and climatic conditions of Minnesota are better adapted to the proper maturing of squash seed than any other section, and as we have taken special care in selecting and improving our strain, the result is the very highest type known. It matures earlier, keeps better and commands a higher price than that grown from other seed. The vines are of strong, running growth and bear a good number of large pear-shaped fruit. The shell is hard, strong and dark green in color; thickly covered with a rough, warty growth. The flesh is a bright orange-yellow, fine-grained, very dry, sweet and rich flavored. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.



Northrup, King & Co.'s
Improved Hubbard Squash.



Mammoth Chili Squash. As they come from the field.

1600. Mammoth Chili.

Weigh 200 lbs. or more. Immensely Profitable. Very Productive.

Attains an enormous size, often reaching a weight of 200 pounds, and not infrequently weighs 300 pounds. Despite its size, its flesh is rich and fine flavored. It is especially desirable for stock feeding and exhibition purposes. From the illustration you will note its uniformly large size. For feeding cows it is best to cut them up, mixing with ground feed. As the yield an acre will run from 8 to 15 tons, it will thus produce a very cheap and nutritious feed. In feeding to swine, all that is necessary is to break the squashes open and they will help themselves.

Mammoth Chili Squashes carry off the prize at nearly every show where they are exhibited. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

1610. Boston Marrow. A large fruited, hard shelled, winter sort, with bright orange skin and deep orange flesh. Vine of strong, running growth and very productive; fruits oval. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 70c.

1615. Chicago Warty Hubbard. Is similar in size and quality to the Hubbard. The vines are vigorous and productive, while the large, dark olive-green fruits are rather more heavily warted. An excellent keeper and of splendid quality. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

1620. Gregory's Delicious. In dryness, sweetness and richness of flavor, surpasses all other squashes. The shell is green in color, the flesh a rich orange. An excellent winter keeper. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

1625. Red or "Golden" Hubbard. This is identical in size, form and fruitfulness with the Chicago Warty Hubbard; the chief distinction being that the heavily warted skin is of a rich orange-yellow turning to a deep salmon-red when ripened. It is of fine quality. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

SUMMER VARIETIES.

1630. Delicata. May be used either as a summer or winter variety. Matures about the same time as the summer varieties, and is of very fine flavor. Orange-yellow, splashed and striped with very dark green. The quality is rich and dry, wonderfully solid and heavy. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

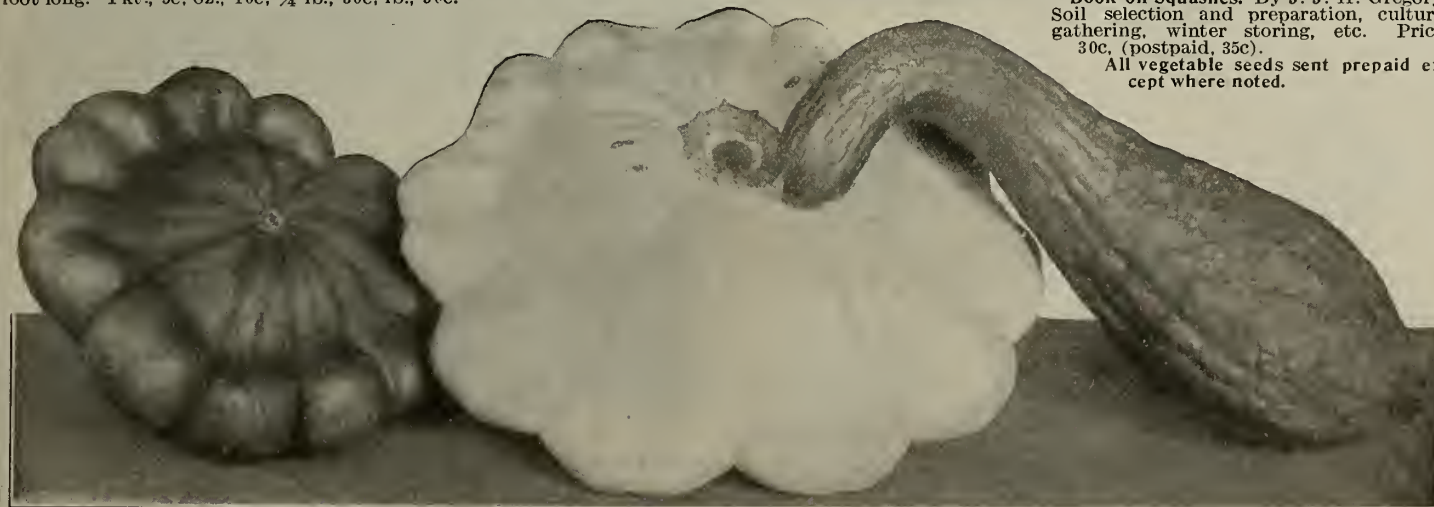
1635. Golden Summer Crook Neck. Early and prolific. The fruits are of the true crook-neck type, heavily warted, and of light golden color; about one foot long. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., 90c.

1640. White Bush Scallop. (Patty Pan.) Matures early and will bear throughout the season if fruits are kept gathered. Squashes are clear white and of large size. Flesh is thick and very fine quality. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., 90c.

1645. Yellow Bush Scallop. A very early, flat, scallop variety of large size; color, yellow; flesh pale yellow and well flavored. Has a very small seed cavity. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., 90c.

Book on Squashes. By J. J. H. Gregory. Soil selection and preparation, culture, gathering, winter storing, etc. Price, 30c. (postpaid, 35c).

All vegetable seeds sent prepaid except where noted.



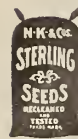
Yellow Bush Scallop Squash.

White Bush Scallop Squash.

Golden Summer Crook Neck Squash.

TOMATO

For Culture of Tomato see page 51.



1650. Northrup, King & Co.'s Sterling.

(Sold only in sealed packages.) This is an early, large and perfectly smooth tomato of perfect flavor, very solid, and strikingly attractive in general appearance. In color it is a glossy crimson, tinged with pinkish purple. It is enormously productive, one plant alone having been known to produce nearly a bushel of ripe fruit. In addition to its earliness it continues to produce ripe fruit until frost. It is, we think, the best of all tomatoes for family use and is unsurpassed as a money maker for the market gardener. Pkt., 10c; oz., 30c; ¼ lb., \$1.00.



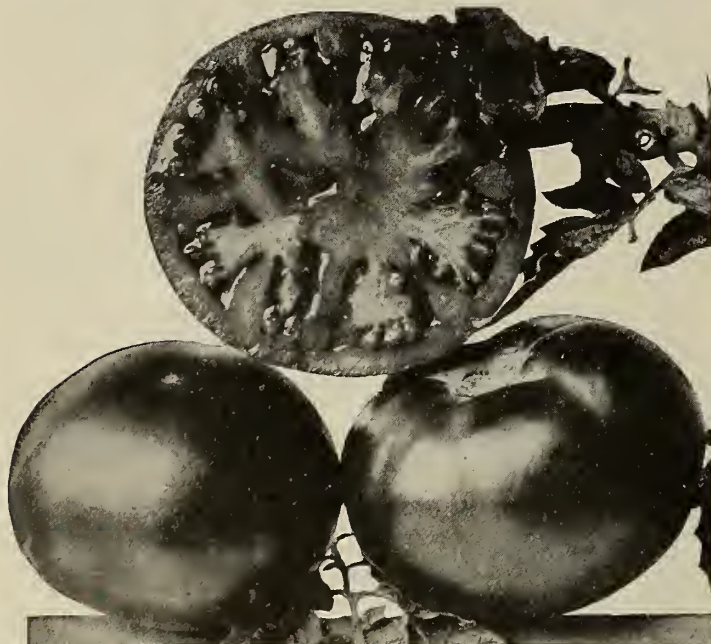
1655. Northrup, King & Co.'s Peerless.

(Sold only in sealed packages.) This magnificent tomato possesses every point going to make the perfect tomato, except earliness. It is of very large size, velvety smoothness, bright attractive color, symmetrical form, great prolificness, remarkable firmness, wonderful solidity and splendid flavor. As a keeper it is probably the best of all, rendering it invaluable as a shipper. The seed cells are small and the center is without the hard core which is an objectionable feature in so many tomatoes that are otherwise good. Pkt., 10c; oz., 30c; ¼ lb., 90c; lb., \$3.00.

1660. Acme. Early and bears fruit until cut off by frost. Fruit is purplish, always round, smooth and of good size, and is borne in clusters of four or five; free from cracks and stands shipment well. Flesh is solid and of excellent flavor. Does well both outdoors and under glass. This is a good canning variety. Pkt., 5c; oz., 25c; ¼ lb., 75c; lb., \$2.50.

1665. Beauty. (Livingston's.) One of the smoothest skinned and best of the large sorts. The vines are large, vigorous and very productive. The fruit is large, uniform in size and very smooth. Skin purplish pink, flesh light pink and of excellent flavor. Pkt., 5c; oz., 25c; ¼ lb., 75c; lb., \$2.50.

1670. Crimson Cushion. A continuous and late fruiter. Of immense size, often weighing a pound, and smooth as an apple. Ripens thoroughly all over. Nearly round and of very good quality, being free from acid taste; color, bright scarlet. Nearly seedless and as solid as beefsteak. A prodigious bearer. Pkt., 5c; oz., 25c; ¼ lb., 75c; lb., \$2.50.



Dwarf Champion Tomato.

1675. Dwarf Champion. Dwarf and compact in habit; sold by some seedsmen as the Tree Tomato. Stands up well even when loaded with fruit, having a stiff, bushy stem; can be planted close together; very desirable in small gardens; early. It is always smooth and attractive; the skin is tough and flesh solid, but has no hard core and is of good flavor. Pkt., 5c; oz., 30c; ¼ lb., 90c; lb., \$3.00.

1678. Earlibell. A very early and prolific bearer. The fruits are borne in clusters, are smooth, uniform in shape and have the peculiar habit of ripening an entire cluster at one time. In color, they are a deep, glossy scarlet. In quality and flavor they are excellent. For the market gardener as well as the home garden, this sort will be found very desirable. Pkt., 10c; oz., 35c; ¼ lb., \$1.00; lb., \$3.50.

1685. Favorite. (Livingston's.) Large, smooth, blood-red sort; early; ripens all over and through at once. Will bear shipping long distances. Very few seeds and has no hard, green core. Pkt., 5c; oz., 25c; ¼ lb., 75c; lb., \$2.25.

1690. Fordhook Early. One of the earliest; fruit shapely. Ripens up evenly about the stem. Fruit rich crimson in color but tinted with purple like the well known and favorite Acme. Pkt., 5c; oz., 25c; ¼ lb., 75c; lb., \$2.50.

1695. Livingston's Coreless. The most perfect-shaped canning variety. In shape it is almost round. The depression at the stem end has been almost eliminated, making it a most profitable variety for canning, owing to the small amount of waste. It is immensely productive, producing clusters of from four to seven fruits, all of marketable size; always free from green core; ripens all over and through and right up under the stem all at once. A grand slicing variety on account of the bright red, solid, meaty and delicious flesh. One of the best for long distance shipping. Pkt., 10c; oz., 35c; ¼ lb., 95c; lb., \$3.25.



Northrup, King & Co.'s Sterling Tomato.

1692. Golden Queen. A very handsome yellow tomato of large size, solid and smooth; very productive. Pkt., 10c; oz., 30c; ¼ lb., 90c; lb., \$3.00.

1700. Livingston's Globe. Perfectly globe-shaped, very early, large, smooth, has few seeds. firm fleshed, ripens evenly; rose-colored tinged with purple, very productive; an excellent keeper, flavor superb. A fine variety for greenhouse or for early outdoor growing. Pkt., 10c; oz., 35c; ¼ lb., \$1.00; lb., \$3.50.

1705. Perfection. (Livingston's.) One of the handsomest varieties and those who have grown the large, round, smooth, beautiful, red fruit claim it is of superior quality. Pkt., 5c; oz., 20c; ¼ lb., 65c; lb., \$2.00.

1710. Stone. This variety is very large and of a bright scarlet color; very smooth, ripening evenly to the stem without a crack, exceedingly solid; is an excellent shipper; quality the very best; fine for canning; a good keeper; without hard core; not subject to rot; its vines and foliage rank and robust. Pkt., 5c; oz., 20c; ¼ lb., 65c; lb., \$2.00.

1712. Trucker's Favorite. A purple variety of unusual merit. Its fine smooth, uniformly shaped fruits command the highest market price. The fruits are thick meaty and very solid; the meat is of the finest flavor, making them equally desirable for slicing, canning and cooking purposes. A basket of these tomatoes is a most attractive sight and those offering them for sale will find the demand larger than the supply. Pkt., 10c; oz., 35c; ¼ lb., \$1.00; lb., \$3.50.



Ponderosa Tomato.

1715. Ponderosa. This is the largest fruited tomato and is of a fine quality for slicing. The vines are of strong growth; fruits oblong in form, deep through, and generally ridged or ribbed; deep purple in color. They are solidly fleshy with small seed cells; of fine flavor. Planted in good soil, fruits frequently attain a weight of one pound or more. Pkt., 10c; oz., 40c; ¼ lb., \$1.25; lb., \$4.00.

TOMATO

Northrup, King & Co.'s
1720. Early Minnesota
Tomato.

The Earliest Good Tomato.
Sold only in Sealed Packages.



Our stock of this splendid tomato has come in competition in the race for earliness with numerous other varieties sent out under strong claims, and has beaten them all, and remains today, as it was when we first offered it several years ago, the earliest of all the good varieties, very hardy and succeeding everywhere. The Imperial, Early Ruby and Earliana are excellent sorts but the Early Minnesota is superior to these in shapeliness, color, size, smoothness, solidity and flavor, as well as being earlier. When we say the earliest tomato, we of course mean the earliest good tomato. There are several sorts a very little earlier, but they are gnarled, ridged, small, tasteless and unworthy the name of tomato, and unfit for use. Those wishing the earliest good tomato must have our Early Minnesota. Pkt., 10c; ½ oz., 20c; oz., 35c; ¼ lb., 95c; lb., \$3.25



Northrup, King & Co.'s Early Minnesota Tomato.



June Pink Tomato.

Culture. Sow seed in hot-beds or in boxes in the house in March. As soon as the plants are well started, remove to cold frames or small pots and harden the plants by removing the cover from the frames or setting the plants raised in the house out doors for a portion of each warm day.

When danger of frost is past transfer to the garden or field and set in rows from 3½ to 5 feet apart, according to variety. One-quarter lb. of seed will produce plants for one acre; one ounce will make 1,500 plants.

1725. Chalk's Early Jewel. The largest, smoothest and finest flavored, extra early bright red tomato. About ten days later than Spark's Earliana. It is a heavier cropper, with tomatoes of larger size and sweeter flavor, produced throughout the season. The plants are of bushy, compact growth, heavily loaded with fruit. The tomatoes are of good size, just right for market; very solid and deep through, almost round; color bright scarlet, ripening to the stem without cracks or green core. Flesh is thick, solid, of fine flavor, with few seeds; the skin is strong enough to make it a good shipping variety. Pkt., 10c; oz., 35c; ¼ lb., 95c; lb., \$3.25.

1728. June Pink. One of the earliest varieties of tomatoes and a special favorite with those who like the pink color. The fruit is borne in clusters and begins to ripen very early. The tomatoes average three inches in diameter and are of excellent quality. The yield is heavy and continuous until the vines are cut down by frost. Pkt., 10c; oz., 35c; ¼ lb., \$1.00; lb., \$3.50.

1730. Spark's Earliana. A perfect early tomato, large in size and beautiful in color, nearly seedless and very solid, a vigorous grower and prodigious bearer, yielding its splendid fruit until frost. Earliana has very few seed cells, and is nearly seedless. Pkt., 10c; oz., 30c; ¼ lb., 90c; lb., \$3.00.

1732. Earliana Select. Seed saved from crown and selected fruit. Pkt., 25c; ½ oz., 75c.

1734. Earliana Private Stock. Quantity very limited. A superior stock saved from fine breeding plots, the result of 8 years' selection. 1-16 oz., 75c; ½ oz., \$1.25; ¼ oz., \$2.00.

1735. Husk Tomato. Makes Fine Preserves. This useful fruit, which is also called Strawberry and Ground Cherry Tomato, is greatly valued for use as a preserve, it also makes delicious pies either when ripe or dried with sugar. When ripe the fruits are half an inch in diameter and of very sweet and agreeable flavor. The vines cover the ground and yield enormously of the fruit which is enclosed in a husk or fruit calyx. There are two varieties of the Husk Tomato, the Golden Husk and the Purple Husk. We consider the Golden Husk by far the better and unless otherwise directed will always send Golden Husk on orders received for Strawberry, Ground Cherry or Husk Tomato. Pkt., 5c; oz., 30c; ¼ lb., \$1.00.

SMALL FRUITED TOMATOES.

1740. Peach. These are excellent for eating raw. The fruits resemble a peach, even to the skin which is covered with a slight bloom as in a peach or nectarine. Pkt., 5c; oz., 30c; ¼ lb., 90c.

1745. Red Cherry. Identical with the Yellow Cherry except in color of fruit, which is of a light scarlet. Pkt., 5c; oz., 30c; ¼ lb., 90c.

1750. Red Pear. Fruit pear-shaped, of bright scarlet color, rich flavor. Pkt., 5c; oz., 30c; ¼ lb., 90c.

1755. Yellow Cherry. Fruits are of a light lemon-yellow, about half an inch in diameter, bears early and freely until frost. Pkt., 5c; oz., 30c; ¼ lb., 90c.

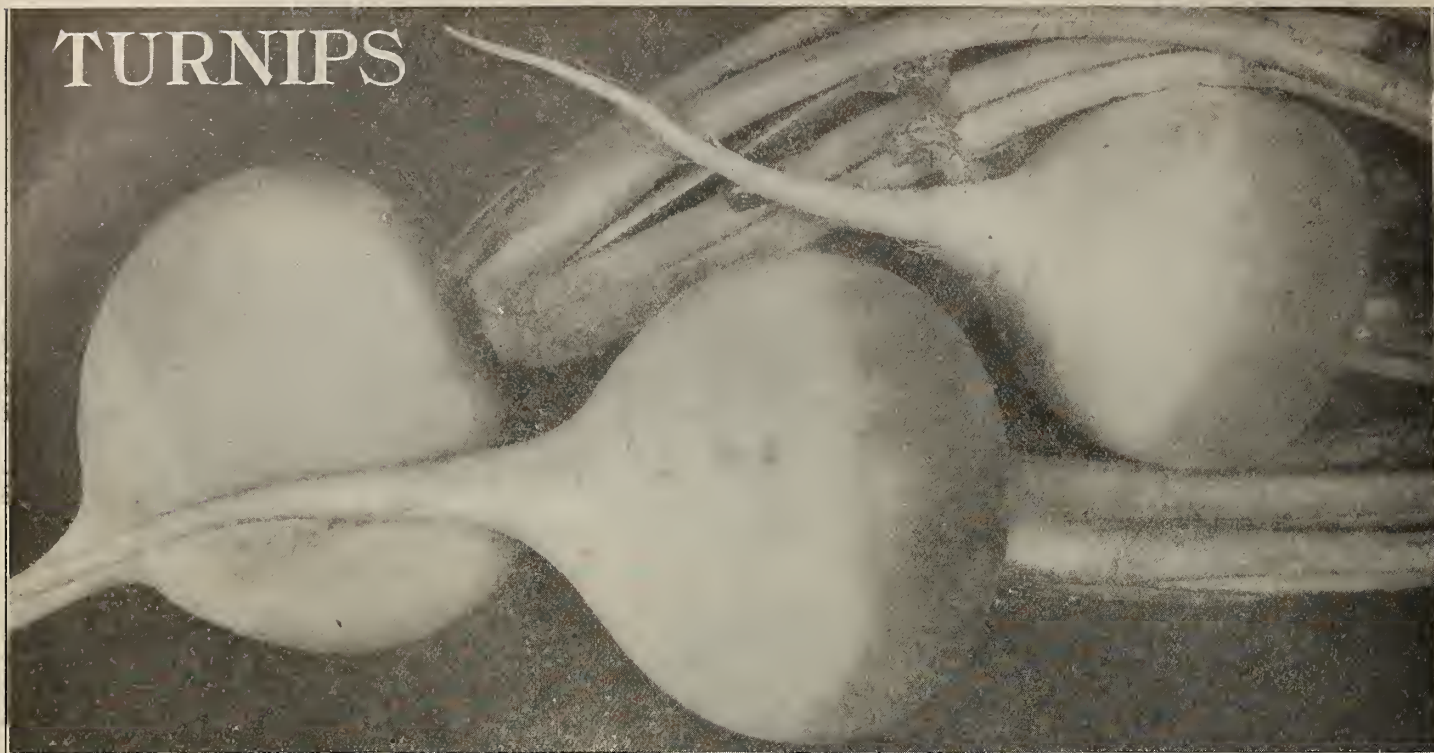
1760. Yellow Pear. Similar to the Red Pear, but fruit is of a handsome yellow. Pkt., 5c; oz., 30c; ¼ lb., 90c.

1765. Yellow Plum. Fruits are yellow, plum-shaped, growing in clusters. Excellent. Pkt., 5c; oz., 30c; ¼ lb., 90c.



Husk Tomato.

TURNIPS



White Globe Turnip.

Culture. Sow seed early in spring for summer crop and early in August for fall and winter crop; 1 oz. of seed will sow 150 ft. of row; 1 to 2 lbs. of seed required per acre.



1770. Northrup, King & Co.'s Early White Model.

(Sold only in sealed packages.) Best for private gardens and home use. Very early and the most perfectly formed, round, white turnip. It has a short top and a single tap root. Flesh, snowy white, solid and sweet. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 80c.

1775. Cow Horn. Pure white, except a little shade of green at the top. Carrot shaped, grows nearly half out of the ground and slightly crooked. Delicate and well flavored; a rapid grower and considered good for market use. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c.

1780. Early White Flat Dutch. A very popular sort for either table use or for market; grows quickly, comes early; clear white skin and flesh of juicy, mild flavor and excellent quality; produces bulbs entirely free from small roots. Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 50c.

1785. Extra Early Purple Top Milan. Similar to the White Milan, except that the roots are a little more flat, and the upper portion is a beautiful purple-red. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00.

1790. Extra Early White Milan. The earliest turnip. Tops very small, distinctly strap-leaved and growing very erect and compact. Bulbs form

Purple Top White Globe Turnips.

earliest of any sort. The clean white roots are smooth, flat, symmetrical and handsome in appearance. The flesh is white, tender and sweet. Pkt., 5c; oz., 15c; ¼ lb., 40c; lb., \$1.25.

1795. Golden Ball or Orange Jelly. One of the most delicious and sweetest yellow-fleshed turnips. Not of large size, but firm, hard and excellent flavor. Keeps well and is superior as a table variety. Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 50c.

1800. Purple Top, Strap-Leaved. The most popular sort. A general favorite with all, and more largely grown than any other turnip; will do well to sow either broadcast or in drills, and will form good sized bulbs in seven or eight weeks. Rather flat and of medium size. Color, purple above ground, white below; flesh, white, fine grained and tender. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c.

1805. Purple Top White Globe. Of a perfect globe shape, about six inches in diameter, with smooth, white skin; flesh pure white, firm and crisp, and of quick growth. A good keeper and is fine for market. Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 50c.

1810. White Egg. A quick grower; a grand good keeper; excellent either as an early or late variety. The flesh is very sweet, firm and mild, never having the rank, strong taste of some varieties. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c.

1815. White Globe. Perfectly globe-shaped; skin white and smooth; leaves, large and dark green. Flesh is white and of good quality. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c.

HERBS

Utilize the corners for a few Pot and Sweet Herbs (for flavoring meats, soups, etc.) indispensable to every garden, while Medicinal Herbs will be found useful. Thrive nicely along sunny side of fence in a deep, fairly rich soil.

Culture. These thrive best in a rich, mellow soil. Sow the seed early in spring in shallow drills, one ft. apart; when up two or three inches thin out or transplant. Cut on a dry day before coming into full blossom, tie in bunches and hang up where they can dry quickly.

1818. Anise. Used for cordials, garnishing and flavoring. Pkt., 5c; oz., 20c.

1820. Balm. Leaves used for making pleasant beverages. Pkt., 5c; oz., 25c.

1825. Basil, Sweet. The leaves are used in flavoring soups, etc. Pkt., 5c; oz., 20c.

1830. Borage. Leaves used for flavoring, and flowers furnish bee pasture. Most easily grown in any waste place. Pkt., 5c; oz., 15c.

1835. Caraway. Grown for seeds; used for flavoring. Pkt., 5c; oz., 10c., ¼ lb., 25c.

1840. Catnip or Catmint. Leaves and young shoots used for seasoning. Pkt., 10c; oz., 40c.

1845. Coriander. Seeds used in the manufacture of liquors, in confectionery and culinary preparations. Pkt., 5c; oz., 10c.

1850. Dill. Seeds have an aromatic odor and pungent taste. Pkt., 5c; oz., 10c., ¼ lb., 25c; lb., 75c.

1855. Fennel, Sweet. Ornamental; when boiled, used in fish sauce. Pkt., 5c; oz., 10c.

1860. Horehound. Used for seasoning and cough remedy. Pkt., 5c; oz., 30c.

1865. Lavender. An aromatic and useful medical herb. Pkt., 10c; oz., 50c.

1870. Marjoram, Sweet. Leaves and shoots for seasoning. Pkt., 5c; oz., 25c., ¼ lb., 75c.

1875. Pennyroyal. Agreeable odor and flavor. Pkt., 10c; oz., 75c.

1880. Rosemary. The leaves of this plant are aromatic. Pkt., 5c; oz., 20c.

1885. Sage. An indispensable herb for seasoning. Pkt., 5c; oz., 15c., ¼ lb., 50c.

1890. Summer Savory. Used for flavoring soups. Pkt., 5c; oz., 10c., ¼ lb., 30c.

1895. Thyme. Leaves and young shoots used for seasoning; a tea is made of the leaves, a remedy for headache. Pkt., 5c; oz., 30c.



Purple Top, Strap-Leaved Turnip.



RUTA BAGA

Swedish Turnip.

This is one of the best and most valuable of root crops. Ruta Bagas do best on new land or light, sandy soil and are for this reason largely grown on breaking, where, without cultivation they produce bountiful crops of excellent quality. They, however, respond freely to care and to obtain the most satisfactory results, the land should be thoroughly prepared, well fertilized and made fine and mellow. A continued spring fallow will be beneficial in destroying weeds in the soil and in forming a fine, firm seed bed, which is desirable for all root crops.

Ruta Bagas are grown for two purposes, for table use and for stock feed. There is a large demand for Ruta Bagas of good quality for household use and many carloads are sold on the large city markets. The supply is frequently insufficient to meet the demand.

The value of Ruta Bagas as a stock feed is not fully appreciated in this country. In Europe and in eastern Canada, very large quantities of Ruta Bagas are produced on practically every farm. They may be very easily grown and more cheaply than potatoes, and usually are worth as much per bushel on the market as potatoes. As an illustration of this point we recall an instance which was brought to our attention a few years ago. Mr. Thos. Harborn, then living at St. Cloud, Minn., a well known short-horn breeder, planted $4\frac{1}{2}$ acres of our Prize Winner and Monarch Ruta Bagas. He raised 2300 bushels. The land was prepared, the seed sown, the field cultivated and the roots harvested, topped and tailed at a cost of 42 days' labor of one man, or less than 4c per bushel. This demonstrates two important points, first the cheapness with which Ruta Bagas may be produced, and second, the importance of using high grade seed, that is to say, seed with a history of big yields behind it.

Our seed is grown for us in England by specialists, whose life work has been the breeding and production of the highest type of Ruta Baga. The aim has been to produce a root with a small top of uniform size and shape, and with a single tap root, a root of high feeding quality, fine flavor and great productiveness.

With Ruta Baga seed which we sell it is possible to raise 15 to 20 tons of roots per acre. With ordinary seed the yield may be one-half to one-third that amount. The difference in cost per acre between using our high grade seed and the cheaper qualities obtainable on the market is so insignificant, that no wise grower can afford to consider sowing anything but the best.

When Ruta Bagas are intended for a cultivated crop, the seed should be sown in drills 15 to 24 inches apart; cover seed $\frac{1}{2}$ inch and thin out to 6 to 8 inches in rows. The yield will be greatly increased by frequent cultivation. The time of sowing will depend somewhat on locality and the purpose for which the crop is to be used. If for market, sow the seed the latter part of June. If for stock feeding, seed may be sown as late as July 15th and it will, under favorable conditions, mature a crop before the ground freezes. Seed may be sown broadcast if desired. Use one ounce to 250 feet of drill, $1\frac{1}{2}$ pounds to the acre in drills or $2\frac{1}{2}$ pounds broadcast.

Order Early. It will be a great convenience both to our customers and to ourselves if orders are sent us early. We aim to fill orders the same day received, but during the rush season find this not always possible—thus the advantage in ordering early.

How to Send Money.

Money can be sent safely either by P. O. order, bank draft, express draft, express order or registered letter. If your order amounts to \$1.00 or more it is best to send by one of the above methods. Postage stamps taken in amounts less than \$1.00. Never send coin in the mail unless in registered letter.



Hurst's Monarch Ruta Baga.

A Minnesota Field of Northrup, King & Co.'s Prize Winner Ruta Baga and a Single Specimen.

1900. Northrup, King & Co.'s Prize Winner.

Sold only in Sealed Packages.

Short neck, small top, firm flesh, symmetrical shape, united with high feeding value, great productiveness, hardness and long keeping qualities, describes the perfect Ruta Baga. Every root of Northrup, King & Co.'s Prize Winner more nearly approaches this ideal than any other strain of Ruta Baga.



Northrup, King & Co.'s Prize Winner Ruta Baga is a purple top, yellow fleshed variety. The roots reach a good size and are exceedingly uniform in appearance. The Prize Winner is an all around Ruta Baga, suited to every purpose and every soil. We do not hesitate to say that in the Prize Winner we possess the handsomest and most productive stock of purple top Ruta Baga known. Valuable not only for stock feeding but for table use as well.

Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 60c. By freight or express at purchaser's expense, 5 lbs., \$2.40; 10 lbs., \$4.50.

Culture. Ruta Bagas do best on new land, or light, sandy soil. Sow the seed from the latter part of June until August in drills 15 to 24 inches apart. Cover seed $\frac{1}{2}$ inch and thin out to 6 to 8 inches in the rows. Cultivate frequently. Can be sown broadcast. Use 1 ounce to 250 feet of drill, $1\frac{1}{2}$ pounds to the acre in drills or $2\frac{1}{2}$ pounds broadcast.

1905. American Purple Top. This strain is of American origin and is a purple top, yellow variety. It has been selected to produce a smaller top and a shorter neck than is usually found; the roots grow to a large size and are of the finest quality and excellent both for the table and for stock feeding. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 55c. By express or freight at purchaser's expense, 10 lbs. @ 40c per lb.

1910. Carter's Hardy Swede. An excellent sort either for table use or stock feeding. Flesh, yellow, solid, firm, sweet and rich. It is a hardy variety and yields heavily. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 55c. By express or freight, 10 lbs. @ 40c per lb.

1915. Hurst's Monarch. Distinct in type, being of tankard shape. On account of the size it attains, it will yield from two to seven tons more to the acre than any other variety. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 65c. By express or freight, 10 lbs. @ 45c per lb.

1920. Sweet German. One of the very best sorts on account of its productiveness and quality. This consideration should count strongly with stock growers, all of whom understand that the quality of the feed regulates the quality of the product. Both flesh and skin are white. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 60c. By express or freight, 10 lbs. @ 45c per lb.

1923. Sweet Russian. Excellent keeper. Desirable for table and stock. Roots, large, globe-shaped, small neck, color white. Flesh, white, firm and sweet. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 60c. By express or freight, 10 lbs. @ 45c per lb.

VEGETABLE PLANTS AND ROOTS.

Turn to page 102 where a full line of Cabbage, Celery, Tomato and other plants are listed and priced. Horse Radish and Mint Roots also are listed on the same page. Asparagus Roots are on page 6; Rhubarb Roots, on page 48; Onion Sets, on page 36; Garlic, on page 27.

Northrup, King & Co.'s Select List of Flower Seeds.

Just a few Suggestions about the Growing of Flower Seeds and the Treatment of the Young Plant.

Early Blooming. If you want your flowers and plants to bloom early, sow the seed late in the winter or early in the spring. Sow them in hot beds, flower pots or shallow boxes. You will find the latter method satisfactory enough, but you will have to keep the plants in the house.

Kind of Soil to Use. The best seeds and the best care on earth will not produce healthy, vigorous plants unless the soil is right. If you can find a rich, sandy loam, use that. It is the best. But if you cannot get such soil, then take two parts black loam, one part sand and one part of decomposed stable manure and mix them thoroughly. This will give you a rich, productive soil.

How to plant the seeds. Place your soil in the hot bed or boxes, as the case may be; smooth the surface and pack quite firmly. Scatter your seeds evenly upon it, and then cover the seed with about twice its thickness of soil and pack it down quite hard. This will give you an ideal planting, and with Northrup, King & Co.'s seeds a good growth is assured.

Temperature and Humidity. After getting your seeds planted, you must be careful and keep them in a warm place—not hot, but just warm—about 80 degrees—until the plants appear. You should be careful, also, and keep the seeds quite moist until the plants appear, after which the soil should not be kept too wet, as there is danger of the plants "damping" off.

Light and Air. Plants of all kinds require plenty of light, fresh air and

sunshine, without which no plant will thrive. They are absolutely essential elements to successful flower raising.

When to Transplant. As soon as the second leaves appear, then is the time to transplant into other boxes, so that the plant may spread out and become more hardy and stocky. When the weather becomes sufficiently warm, then they may be again transplanted into the garden or open border. Care should be taken to water freely until the plants are firmly rooted.

When to Sow Late Flower Seeds. For late summer and fall flowers, sow the seed in fertile soil in the garden or open border in the spring time, giving preference to those locations where the plants are to remain, observing in a general way the directions for early sowing.

Our Hand Book for the Garden is sent free with all flower seed orders, if requested. It contains full and accurate cultural directions on flower seeds as well as other valuable information that cannot fail to interest.

Send in Your Orders Early. Follow the suggestions given in our Hand Book and have the young plants ready to transplant as soon as warm weather comes.

See pages 77 to 82 for list of Hardy Perennials.

In ordering it is necessary to give only the number of packets wanted and the corresponding number in the catalogue. This is arranged for the convenience of our customers and to facilitate the despatch of orders upon receipt.



A well arranged, artistic Flower Border is a delight all through the growing season. Nothing else at equal cost adds so much to the attractive appearance and value of the grounds.

2000. Northrup, King & Co.'s

School Garden Flower Mixture.

The beauty of this mixture lies in the great variety of flowers it contains. It embraces not only all the best known and most popular annuals, but a great many new and rare sorts, gathered especially for this mixture.

This mixture has attracted such wide and favorable attention wherever grown, and has elicited so many inquiries that we have determined to use it largely in our advertising campaign, and so, with this end in view, we have cut the price from 25 cents to 10 cents a package, or three packages for 25 cents; oz., 50c.

2001. Special Mixed Flower Seeds. For the decoration of rural walks, shrubberies, waste places, etc. Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 75c.

2002. Northrup, King & Co.'s

Mixed Flower Seeds for Bouquets and Vases.

An excellent mixture embracing a most charming assortment of all the annuals, suitable for furnishing a perpetual supply of cut flowers from early summer until frost. All of the varieties are of easy culture, requiring very little care. Pkt., 10c; oz., 50c.

2003. Northrup, King & Co.'s

Collection of Six Quick Growing Annual Climbers.

Our collection includes six of the fastest growing Annual Vines, suitable for covering trellises, walls and unsightly fences. Sown in the spring in warm ground, they rapidly attain perfection and flower the same season. Collection, 25c.

2005. Northrup, King & Co.'s

Hardy Perennial Flower Seed Mixture.

Nothing is more attractive than a permanent bed or border of Hardy Perennials. Many of them bloom the first year if sown in accordance with cultural directions as outlined in our "Hand Book for the Garden," (which, if asked for, is sent free with all orders for flower seeds) and continue to bloom year after year, increasing in size and beauty, making a grand and gorgeous display throughout the entire summer. Our selection embraces all of the most popular and hardiest varieties, those that cannot fail to please, and we offer extra large packets embracing a large assortment, at 25c a packet.

Our customers should not fail to ask for our "Hand Book for the Garden."

Three Beautiful Asters

Ostrich Feather Aster "Mary", Comet Aster "Beulah", Paeony Flowered Aster "Cynthia".

These three splendid varieties were offered by us only a few years ago but the reception which they have received justifies us in again placing them before our customers. Space will not permit the use of the letters of recommendation we received. These three asters embrace the most popular colors and will continue to give pleasure and satisfaction to the thousands who will purchase them this season on our recommendation. So sure do we feel of this that we again make the offer to promptly and without question return the money paid for these asters to any purchaser who writes us that they did not prove in every sense satisfactory and well worth the money invested.

2007. Aster "Mary." This variety is very appropriately named being a beautiful snow white, very large and delicately petaled. The petals are long and finely lacinated, having the fine feathery appearance of an ostrich plume. The blossoms are double to the center and are borne on long stiff stems making them of great value for cutting and bouquet work. This, as well as the "Beulah" and "Cynthia" Asters, is fine for florists and growers for market. It has the additional merit of being earlier than other large flowering sorts. Pkt., 10c; 3 pkts. for 25c.

2008. Aster "Mary," all colors mixed. Pkt., 10c.

2009. Aster "Beulah." Belonging to the Giant Comet class of Asters, it possesses many pleasing characteristics well known to lovers of this strain, but the blooms are even larger, some specimens measuring nearly six inches in diameter. The long petals are curved and twisted into an immense head. The delicate pink of the "Beulah" Aster recommends it especially for decorating purposes as the color harmonizes so nicely with its surroundings. The flowers are carried on long, strong stems. Pkt., 10c; 3 pkts. for 25c, postpaid.

2010. Aster "Beulah," all colors mixed. Pkt., 10c.

2011. Aster "Cynthia." Of all the Paeony flowered Asters none excels in color, form or size the "Cynthia." Those who prefer a rich purplish-blue in an Aster will find in this the object of their affection. It is indeed a royal favorite and well deserves a high position with the rest. When cut for house decoration it will remain fresh for many days. Pkt., 10c; 3 pkts. for 25c, postpaid.

2012. Aster "Cynthia," all colors mixed. Pkt., 10c.

2013. Collection. One full size packet of each of the above beautiful Asters, "Mary," "Beulah," and "Cynthia" will be sent postpaid to any address for only 25c.

2014. Collection. One full size packet of each of the mixed colors of the "Mary," "Beulah," and "Cynthia" type, for only 25c.

A Constant Surprise.

Your Sterling Mixture of Asters was a constant surprise. The Sterling German Pansies are certainly fine, no color seems to have been forgotten.

MINNIE J. BOHRER,
Lakeland, Minn.



MARY

How 25 Cents Yielded \$20.00.

Last spring I sent you an order for Beulah, Cynthia and Mary Asters and at the same time to other seedsmen for other varieties. Of your three Asters we sold to the florists here over \$20.00 and are still cutting. They came into flower very early and are of fine quality. On August 9th they were in full bloom. I will want more of them next spring.

L. O. CLAPROOD,
Lima, Ohio.

Look Like Chrysanthemums.

We have had splendid results with the Aster seed we procured from you, namely, "Cynthia," "Mary" and "Beulah." We have a fine bed of these and the sight is one not soon to be forgotten. They look more like Chrysanthemums than Asters. We have many of them measuring four and one half inches in diameter.

P. S. BERG, Dickinson, N. D.

Asters Especially Fine.

I have used your seeds two seasons, and have been highly pleased with the results. Have no reason to say they are anything below what they are represented to be. My experience has been chiefly with flower seeds. All I have used have done well, but the Asters were especially fine.

(MISS) S. V. BROOK, James River, Va.

Asters were Grand.

I have used your seeds for three years, and found them all very satisfactory. The Asters are grand. Our seasons are late; it was June 1st when I planted my Asters and they are fine, much admired by all who saw them. I recommend your seeds to all my friends.

Very Satisfactory.

I have used your seeds for some years and have always found them very satisfactory; especially some Asters I sent for last spring, which proved to be very beautiful.

(MRS.) E. A. HOLTE, Strum, Wis.

Cultural Note on Asters.

The cultivation of the Aster is simple. Do not sow the seed too early; the middle of March indoors is considered a very good time. Successive sowings should be made, if a constant supply of flowers is desired from July until frost. For early use sow the seed in shallow boxes, covering with one-fourth inch of soil. Later sowings may be made in hot-beds or cold frames; or in the open ground, broadcast or in drills, when all danger of frost is past. Never use the same ground or location twice in succession. The soil should be rich and moist. We recommend pulverized sheep manure, wood ashes and phosphates as fertilizers. If barnyard manure is used it should be thoroughly decomposed. Allow plants plenty of room; rows should be 3 feet apart and 15 inches between the plants in the row, but the distance may be less according to the habit or growth of the variety.

The aster beetle or fly is one of the worst pests but there seems to be only one crop of them, and these if caught and killed, are not usually followed by others. Dusting the plants with air-slacked lime or dry ashes will be found beneficial. Root lice and cut worms are also troublesome. Applications of kerosene emulsion or tobacco water around the roots are effective. Aster blight or "yellows" can usually be traced to the work of the above pests. The plants should be pulled and burned if they should become badly diseased. Growers should remember that prevention is better than cure. Good cultivation and the timely use of the remedies suggested should produce healthy, vigorous plants.



CYNTHIA



BEULAH

ASTERS

No flower, not even excepting the Pansy, with its marvelous range of color, or the Sweet Pea, with its wonderful display of bloom, can approach in many important respects the Aster. As a bedding plant it has no superior, and is the last to succumb to the icy touch of winter.

As a cut flower it rivals the Chrysanthemum in beauty and diversity of form and color, and remains firm and fresh for days. Asters are easily grown, very hardy, and offer themselves for use at a time when other garden favorites are gone.

Northrup, King & Co.'s Sterling Mix- tures of Asters.

(Sold only in sealed packages.) These superb mixtures which are offered in the Tall, Half Tall and Dwarf varieties are the result of many years' experience in combining all desirable colors of each distinct and most beautiful type. Every year we have said we can make it no better, and yet every year we have found some new gem to add to the galaxy. This we will continue to do as fast as new varieties are perfected and new colors fixed, always with the view of making our Sterling Mixture of Asters the finest experience can suggest or that money can buy. Each section; Tall, Half Tall or Dwarf embraces the finest colors of each class.

2015. Northrup, King & Co.'s Sterling Mixture of Tall Varieties. Pkt., 15c; 2 pkts., 25c; ½ oz., 50c; ½ oz., \$1.50.

2017. Northrup, King & Co.'s Sterling Mixture of Best Half Tall Varieties. Pkt., 15c; 2 pkts., 25c; ½ oz., 50c; ½ oz., \$1.50.

2018. Northrup, King & Co.'s Sterling Mixture of Dwarf Varieties. Pkt., 15c; 2 pkts., 25c; ½ oz., 50c; ½ oz., \$1.50.

2020. Northrup, King & Co.'s Fire Ball. (Sold only in sealed packages.) The nearest approach to a pure, brilliant scarlet of any Aster yet introduced. The plants are literally covered with perfectly formed flowers of faultless Paeony shape. Height, 10 to 12 inches. Pkt., 10c.

2022. Mikado Pink Aster. A magnificent, large flowering Aster, mid-season, belonging to the Giant Comet class. Petals are narrow, very long, and gracefully reflexed. The outer petals show to their full extent, while gradually toward the center they bend and curve across each other in such magnificent disorder as to make the fluffiest Aster we have ever seen. The color is a most exquisite shade of shell pink and for a mid-season pink this Aster is without a rival. Pkt., 25c; 2 pkts., 40c.

2023. Daybreak Aster. This superb Aster is one of the rare gems that has come to stay; color a delicate sea-shell pink; flowers are round, very large and full, borne upright on long, stiff stems. Pkt., 10c.

2024. Lavender Gem Aster. One of the most beautiful Asters; color a charming shade of lavender, deepening with age. The flowers are always full double, borne in profusion on long, slender, wiry stems. Of the Ostrich Feather type, large, artistic and loosely arranged. Pkt., 15c.

2025. Purity Aster. A snow-white Aster similar to Daybreak except in color. The plants are very neat, of medium height, and are literally covered with a mass of flowers like snowballs. Pkt., 10c.

2026. Royal Purple Aster. A medium late variety; flowers large and full with centers well covered; petals flat and incurved. If uncut, this variety will remain in bloom until late in the fall, the flowers retaining their beauty and vigor for a long period. Pkt., 15c.

2027. Snowdrift Aster. The earliest Aster in cultivation coming into bloom in July. A handsome white of the Ostrich Feather type, not surpassed in size or beauty by any of the late varieties. Pkt., 15c.

2028. Violet King Aster. A new type and color in Asters. The formation of the flower is very distinct from any other variety; petals resemble the quilled sorts, but are much larger and broader, those in the center, twisted, curled and incurved, completely covering the crown. Season, mid-summer to frost. The bloom is round, full and very large, many of the flowers measuring from four to five inches in diameter. Its color is a soft violet-lilac. Pkt., 15c.

2030. Rose King Aster. Rose King in color is a particularly pleasing shade and one that goes well with its mate, Violet King. It possesses all of the characteristics of a good Aster; vigorous in habit, with stems frequently two feet in length, flowers large as saucers, crowns completely covered, a good keeping variety and unsurpassed for cutting. Petals are stiff and strong and do not show the effects of shipping until long after many other varieties would be completely wilted. Pkt., 25c; 2 pkts., 40c.

Asters Particularly Satisfactory.

I have used your seeds for the past eight years and have always found them excellent. The Asters proved particularly satisfactory. Victoria, Semple's Branching and Comet are standard varieties with me.

(MISS) CLARA L. RICE, Flintville, Wisconsin.

Home Floriculture. By E. E. Rexford. Flowering and ornamental plants in the house and garden. Price, \$1.00, (postpaid, \$1.15).



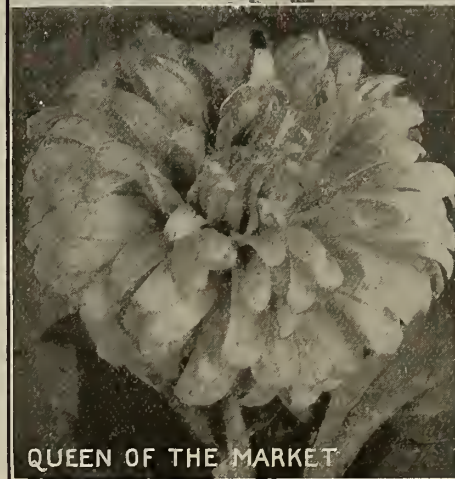
VICTORIA



VIOLET KING



SEMPLE'S BRANCHING



QUEEN OF THE MARKET

New Giant Comet Aster. The plants of this new variety are perfectly true in character, growing 18 to 24 inches high. The flowers measure from 3½ to 4½ inches in diameter resembling in shape and its artistically curved and twisted petals, the finest Japanese Chrysanthemums.

- | | | |
|-------|------------------------------|------------|
| 2032. | Snow White..... | pkt., 10c. |
| 2033. | Dark Blue..... | pkt., 10c. |
| 2034. | White Striped with Pink..... | pkt., 10c. |
| 2035. | Crimson..... | pkt., 10c. |
| 2036. | Rose Pink..... | pkt., 10c. |
| 2037. | Mixed Colors..... | pkt., 10c. |

Christmas Tall Aster. Of branching pyramidal form, blooms quite early; the flowers are finely double; height, 15 inches.

- | | | |
|-------|----------------------------|------------|
| 2040. | Pure White..... | pkt., 10c. |
| 2041. | Dark Blood Red..... | pkt., 10c. |
| 2042. | Light Blue with White..... | pkt., 10c. |
| 2043. | Carmine..... | pkt., 10c. |
| 2044. | Dark Blue..... | pkt., 10c. |
| 2045. | Mixed Colors..... | pkt., 10c. |

Hohenzollern Aster. The finest type of the Giant Comet Asters. Much larger than the Giant Comet, the petals longer and more curled and twisted and produced in greater abundance. Resemble the finest Japanese Chrysanthemums. Borne on long stems which make them cut flowers par excellence.

- | | | |
|-------|-------------------|------------|
| 2050. | White..... | pkt., 10c. |
| 2051. | Azure Blue..... | pkt., 10c. |
| 2052. | Rose..... | pkt., 10c. |
| 2053. | Mixed Colors..... | pkt., 10c. |

Ostrich Feather Aster. Candelabra-shaped habit of growth. Flowers large with very long loosely curved petals. Very fine as cut flowers; height, 15 inches.

- | | | |
|-------|---------------------|------------|
| 2055. | Pure White..... | pkt., 10c. |
| 2056. | Blue..... | pkt., 10c. |
| 2057. | Crimson..... | pkt., 10c. |
| 2058. | Malmaison Pink..... | pkt., 10c. |
| 2059. | Light Yellow..... | pkt., 10c. |
| 2060. | Mixed Colors..... | pkt., 10c. |

Paeony Flowered Perfection

Aster. Has double, large and beautiful flowers with incurved petals, resembling very much a Paeony in shape. The plants are strong and upright, bearing handsome blooms on long, stiff stems. Extra fine for bouquet work. Height, 20 inches.

- | | | |
|-------|-------------------|------------|
| 2065. | Blue..... | pkt., 10c. |
| 2066. | Snow White..... | pkt., 10c. |
| 2067. | Crimson..... | pkt., 10c. |
| 2068. | Mixed Colors..... | pkt., 10c. |

Queen of the Market. The earliest first-class Aster, coming into flower almost a month in advance of the later sorts. The flowers are of good size, borne on long stems, making them very valuable for cutting.

- | | | |
|-------|-------------------|------------|
| 2070. | Crimson..... | pkt., 10c. |
| 2071. | Dark Blue..... | pkt., 10c. |
| 2072. | Light Blue..... | pkt., 10c. |
| 2073. | Rose..... | pkt., 10c. |
| 2074. | Blush..... | pkt., 10c. |
| 2075. | White..... | pkt., 10c. |
| 2076. | Mixed Colors..... | pkt., 10c. |

Semple's Branching Asters.

The flowers are magnificent and very large, 4 inches across, are very double, of purest colors, and borne on long stems. Height, 18 inches to 2 feet.

- | | | |
|-------|-------------------|------------|
| 2081. | Pure White..... | pkt., 10c. |
| 2082. | Pink..... | pkt., 10c. |
| 2083. | Lavender..... | pkt., 10c. |
| 2084. | Purple..... | pkt., 10c. |
| 2085. | Mixed Colors..... | pkt., 10c. |

Giant Victoria Asters. The most beautiful and perfect of all Asters. The flowers are very large and double clear to the center. The plants bear ten to twenty flowers, pyramidal in form; height, 1½ ft. These Asters are unexcelled for gorgeousness of coloring, being borne in many tints and shades.

- | | | |
|-------|-------------------|------------|
| 2091. | Scarlet..... | pkt., 10c. |
| 2092. | Pure White..... | pkt., 10c. |
| 2093. | Blue..... | pkt., 10c. |
| 2095. | Mixed Colors..... | pkt., 10c. |

2100. Victoria Aster, "Miss

Roosevelt." Primrose, changing to flesh color. While all previously introduced Asters of changing colors are white when ripening, the flowers of this new Aster in the first stage are of a clear primrose tint, which by degrees passes into a delicate flesh color. The gradual transition produces a most charming hue. Pkt., 10c.

Flowers and How to Grow Them. By Eben E. Rexford. Price, 50c, (postpaid, 55c).



SWEET ALYSSUM

2105. Abutilon. Flowering Maple. These grow rapidly and make fine, large bell-shaped flowers in great profusion. Pkt., 10c.

2107. Adlumia. Allegheny Vine. A graceful, hardy biennial climber, but as it resows itself year after year, may be considered a perennial. The feathery foliage closely resembles that of the Maiden Hair Fern, the flowers are tube-shaped, flesh-colored and completely cover the plant. Very desirable to cover trellises, stumps of trees, etc. Pkt., 10c.

2108. Adonis. Showy annuals of easy culture, with pretty, fine cut foliage, dark crimson flowers with light center. 1 foot. Pkt., 5c.

Ageratum. One of the best bedding and border plants, blooming from early summer until frost. Flowers do not fade in the rain. Pkt., 5c.

2110. Blue. Pkt., 5c. **2112. White.** Pkt., 5c. **2114. Dwarf Mixed.** Pkt., 5c.

Alyssum. Sweet. A very pretty plant for beds, vases, baskets, edgings or rock work. Sweet scented and blooms profusely all summer. Pkt., 10c.

Amaranthus. Brilliant foliaged annuals, growing from 3 to 5 ft. high. Very useful in borders of tall plants or for the centers of large beds. Give plants plenty of room.

2118. Caudatus. LOVE LIES BLEEDING. Brilliant blood red of drooping habit, 3 ft. Pkt., 5c. **2120. Tricolor.** JOSEPH'S COAT. Leaves red, yellow and green. Pkt., 5c.

2122. Sunrise. A most beautiful plant; height, two feet; the leaves are long and narrow, the upper ones of the brightest glowing crimson. Pkt., 10c.

2123. Ambrosia. A hardy annual with long spiral stems, bearing an abundance of small, round, greenish-yellow buds and blossoms, which are exceedingly fragrant. It is as desirable as the Rose Geranium as a plant with fragrant foliage and for making up into bouquets and other floral work. Its long, beautiful, fringed spirals of lovely green are unsurpassed. It is one of the easiest plants to grow and seeds may be sown early in open ground. Pkt., 5c.

2125. Anchusa. Cape Forget-Me-Not. A rare annual of great beauty. Grows two feet high.

It will thrive in a shady, out-of-the-way place where scarcely anything else will grow. It resembles a large beautiful Forget-Me-Not of deep blue color. Blooms all summer. Pkt., 5c.

Antirrhinum or Snapdragon.

Snapdragons were a feature of the old-fashioned garden. Then for a time they were neglected, but suddenly when the improved new sorts appeared, they became one of the most fashionable bouquet flowers. Today they are being raised in gardens everywhere since the splendid flower spikes appearing all summer, are as valuable for bedding effects as for cutting and form a pleasing contrast to some of the stiffer, coarse annuals.

Culture. Should be sown in open ground the latter part of May. It is best to start seeds indoors in a shallow box or in a hot-bed, in a temperature of about 65 degrees. Cover seeds to a depth of four times their size and press surface firm with a board. Water with a fine spray. Transplant seedlings after second leaves form and remove to garden when weather is warm and settled.

2127. Giant White Pkt., 10c.

2128. Giant Scarlet Pkt., 10c.

2129. Giant Garnet Pkt., 10c.

2130. Giant Yellow Pkt., 10c.

2131. Giant Pink Pkt., 10c.

2132. Giant Striped Pkt., 10c.

2133. Giant Mixed Pkt., 10c.

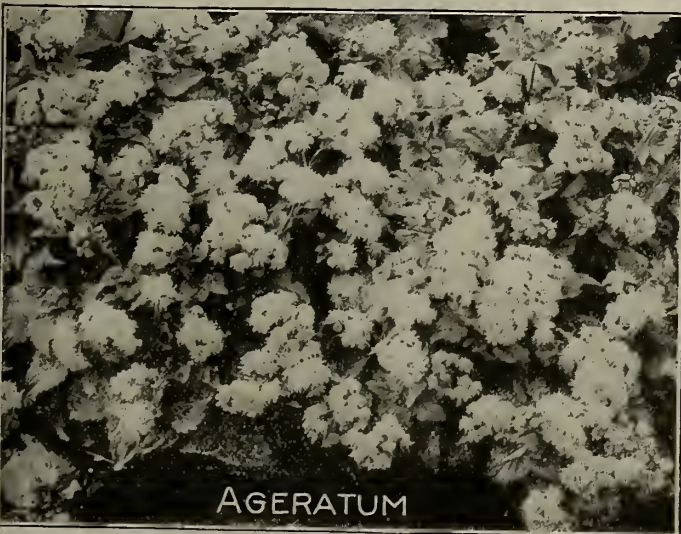
2134. Queen of the North. Grows 1 foot high and densely covered with large white flowers. A gem for beds and borders, valuable for pot culture. Pkt., 5c.

2135. Tom Thumb Mixed. Large variety of colors; best for bedding. Pkt., 5c.

2136. Tall Mixed. Extra fine selection, best for cutting. Oz., 40c; pkt., 5c.

2140. Arctotis. Blue Eyed African Daisy. A remarkably handsome new annual. It forms a branching bush 2 to 3 feet high. Its flowers are large and showy, being pure white on the upper surface, the reverse of petals being a pale lilac blue. It is of easiest culture and flowers from early summer until late fall. Pkt., 10c.

Culture for Arctotis. Sow in the open ground when danger from frost is past. Cover the seeds to a depth of four times their size and press surface firmly with a board. Water with fine spray.

ANTIRRHINUM OR
SNAPDRAGON

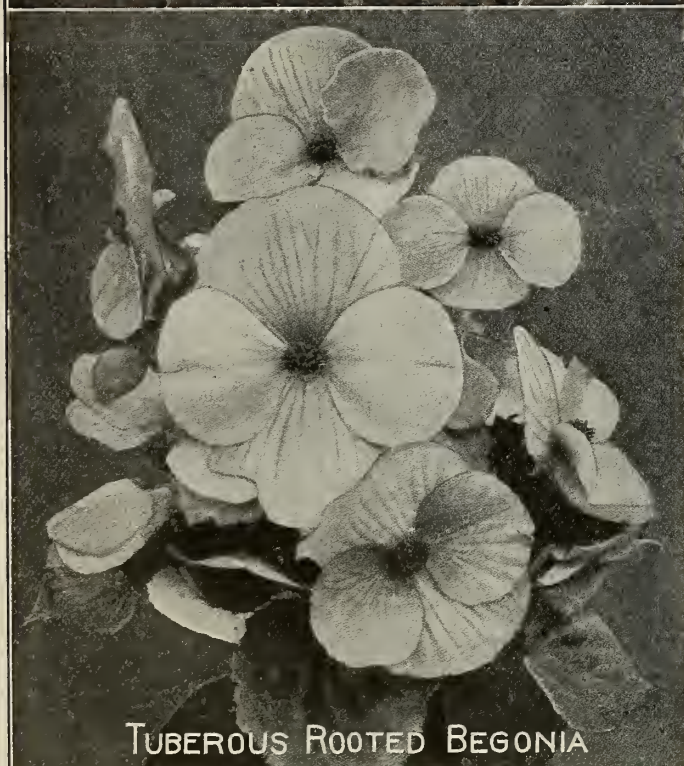
AGERATUM



ARCTOTIS



BACHELOR'S BUTTON



TUBEROUS ROOTED BEGONIA



BRACHYCOME. SWAN RIVER DAISY

2145. Asparagus Plumosus. Probably the most popular house plant today. You grow it for yourselves and neighbors. The leaves are bright green, gracefully arched, surpassing Maiden Hair Ferns in grace, delicacy of texture and richness of color. Pkt., (7 seeds) 10c; 25 seeds, 25c.

2150. Balloon Vine. Annual climber of rapid growth; foliage very pretty; flowers white; seed vessels look like miniature balloons. Height 8 feet; succeeds best in light soil and warm situation. Oz., 25c; pkt., 5c.

Bachelor's Button. Also known as Centaurea, Cornflower, Blue Bottle, Ragged Sailor, Sweet Sultan, etc. These are among the most attractive of all hardy annuals and one of the most popular of all old-fashioned flowers.

2152. Blue. This is the dark blue sort so much in demand for cutting. Oz., 25c; pkt., 5c.

2153. White. Oz., 25c; pkt., 5c. **2154. Mixed.** All varieties. Oz., 25c; pkt., 5c.

2151. Double Bachelor's Button. All colors mixed. Pkt., 5c.

Balsam or Lady Slipper. Double Camelia Flowered. An old and favorite garden flower, producing its gorgeous masses of beautiful, brilliant colored double flowers in the greatest profusion; of easy culture; succeeds in a good rich soil. Our strain is unrivaled for great variety and size of flowers. 2 feet.

Culture. Sow out of doors, when danger from frost is over, in the bed or border where they are to flower. The soil should be well pulverized and the seed covered to a depth of about four times their size. Press down firmly with a board, and thin out so that the plants will not become crowded. For early flowering they should be sown indoors in a shallow box, or in a hot-bed, and transferred to the open ground when the weather becomes suitable.

2155. Snow White......pkt., 5c; **2158. Scarlet.**.....pkt., 5c.

2156. Pink......pkt., 5c; **2159. Light Lemon.**.....pkt., 5c.

2157. Scarlet, spotted white......pkt., 5c.

2160. Solferino, white, striped with purple scarlet......pkt., 5c.

2161. Victoria, satin-white, spotted with scarlet......pkt., 5c.

Northrup, King & Co.'s Sterling Balsam.

2162. Mixed. (Sold only in sealed packages.) The finest mixture possible to combine, representing the best selections from the most celebrated specialists of Europe. The flowers are very large, measuring from 2 to 3 inches in diameter, of perfect form, resembling the flower of the Camelia, and are as double, in fact, the petals are so densely produced that the yield of seed is extremely small, one single plant often producing not more than five seeds. The colors of the flowers are varied and brilliant, comprising pure white, crimson, white shaded lilac, rose, spotted, scarlet, blue, purple and many other tints. Pkt., 10c; 3 pkts. for 25c.

2165. Balsam Apple and Pear. Very curious, rapid and dense climbers, with ornamental foliage and golden-yellow fruit, which opens when ripe, showing the seed and blood-red interior. Apple and Pear mixed, pkt., 5c.

2167. Bean, Scarlet Runner. The well known rapid-growing annual climber producing bright red flowers, from July to September. The foliage being dense, makes it splendid for porches or any location where shade is desired. Pkt., 10c; ¼ lb., 15c.

Begonias. Everblooming Bedding Varieties.

The following are varieties of Begonia Semperflorens, and take rank as bedding plants with Geraniums and Coleus, doing equally well in full sunlight, and surpassing both in positions partially or wholly in shade. They are of sturdy growth, growing about 1 foot high and forming dense bushes, which, from May until frost, are completely hidden with flowers. As pot plants for winter flowering they are superb, remaining a sheet of bloom throughout the entire year. Easily raised from seed. See page 103 for plants.

2169. Vernon Grandiflora. A large flowering form of the above. The flowers are very large and bright orange-carmine in color. The foliage is a beautiful deep red. Pkt., 10c.

2170. Semperflorens, Double Mixed. Many double flowering varieties have been introduced in the last few years. The seed here offered has been saved from one of the best collections in Europe. Pkt., 15c.

2172. Semperflorens, Single Mixed. This mixture contains all the best varieties, ranging in color from pure white to the deepest crimson; splendid. Pkt., 10c.

Begonia. Tuberous-Rooted. Plants of great value for summer decoration or window gardening, blooming the first season from seed, if sown in February or March, in a temperature of 60 degrees. To secure the best of results they should be planted out as soon as the ground becomes warm. They are covered the whole summer with bright and elegant flowers. See page 102 for bulbs.

2173. Single, all colors, mixed. Pkt., 15c.

2174. Single frilled varieties, mixed colors, pkt., 15c.

2176. Bidens dahlioides. One of the finest additions to the list of annuals for cut flowers. The blossom is suggestive of the Dahlia and Coreopsis with both of which this plant is allied. The flowers which are produced on long stems are large, single, pink or white with yellow centers. The seeds should be started inside and planted out when danger of frost is over. They do best in a sunny location, but need cool, moist soil, so it is well to keep the ground well mulched. See illustration on opposite page. Mixed, pkt., 15c.

2175. Bird of Paradise. Poinciana Gillesi. The flowers are golden-yellow in color, measuring 2½ inches across, and are produced in very large trusses. The beautiful part of the flower is the large pistils, which are spread out in fan-like form and are of bright crimson color. The foliage is also highly decorative, reminding one of a very delicate Acacia. If the seed is started early it will produce blooms in great profusion the first year. Pkt., 10c.

2177. Brachycome. Swan River Daisy. Free-flowering, dwarf-growing annual, covered during the greater part of the summer with a profusion of pretty blue or white flowers; suitable for edgings, small beds or pot culture. Pkt., 5c.

Browallia. A favorite profuse-blooming bedding plant, covered with beautiful flowers during the summer and autumn, of intense blue; grows freely in any rich soil.

2178. Speciosa Major. Large-flowering variety, brilliant ultramarine blue, a rare color. Especially valuable as a pot plant. Pkt., 15c.

2180. Elata Coerulea. Large sky blue flowers with a white center. Plants 18 inches high. Pkt., 5c.

2194. Calceolaria. Large flowering plant. These gorgeous plants are especially suited for window decoration. The immense pocket-shaped flowers are borne in the greatest profusion. Colors are yellow, maroon, crimson, white, etc., spotted and blotched in the most unique manner. 1½ feet. All colors mixed, pkt., 20c.

Calendula. Pot Marigold. Free flowering plants of easiest culture, succeeding everywhere and flowering continuously. Flowers double, showy, of large size and pleasing colors. One of the best old-fashioned flowers.

2185. Meteor. Large, double yellow, striped with orange, very showy. Pkt., 5c.
2187. Prince of Orange. Resembles Meteor but is much darker, especially fine. Pkt., 5c.
2188. All colors mixed. Pkt., 5c.

Calliopsis or Coreopsis. Showy and beautiful free-flowering annuals, blooming all summer and excellent for cutting and massing.

2190. Coronata. Showy, large, pure yellow flowers; excellent for bedding. Pkt., 5c.
2192. Nigra speciosa. Rich crimson. Pkt., 5c.

2193. Mixed. All colors. Pkt., 5c.
2195. **Canary Bird Vine.** *Tropaeolum Canariense*. A beautiful rapid annual climber, the charming little canary bird blossoms bearing a fancied resemblance to a bird with its wings half expanded. Oz., 40c; pkt., 5c.

Candytuft. Universally known and cultivated. When sown in April, flowers from July until frost. Very hardy and easy to cultivate. Height, 1 foot.

2197. Giant Hyacinth Flowered. Produces very large elongated heads of pure white flowers. Oz., 75c; pkt., 10c.
2200. Tom Thumb. White. 6 inches. Oz., 30c; pkt., 5c.

2198. White Rocket. Oz., 25c; pkt., 5c.
2201. Crimson. Oz., 25c; pkt., 5c.
2202. Lavender. Oz., 25c; pkt., 5c.
2203. Mixed Colors. Oz., 25c; pkt., 5c.

See page 79 for Perennial Candytuft or Iberis Sempervirens.

2204. **Canna. Indian Shot.** Dwarf Large Flowering French. Unquestionably the finest of bedding plants for the American climate and easily grown from seed. Soak the seeds in warm water until they swell, then sow in sandy loam and place in a hot-bed. When up to the second leaf pot off singly and keep under glass until the proper season for planting. A mixture of many varieties. Oz., 25c; pkt., 10c.

2199. Cardinal

Climber. A graceful annual vine growing readily from seed. It is a strong and rapid climber, with beautiful fern-like, fine cut foliage and covered with a blaze of circular, cardinal-red flowers from mid-summer until frost. Although this vine is of recent introduction it is becoming very popular. It is a valuable addition to our annual climbers and entirely distinct in its beauty. In the Armory Gardens at Minneapolis it has been greatly admired by all visitors. Soak seed until it swells then start indoors and transplant outside after all danger of frost is over. Pkt., 25c.

Best Annual Climbers.

Following is a list of the best annual climbers, all of which can be raised from seed: Cardinal Climber, Canary Bird Vine, Centrosema, Dolichos, Gourds, Minneapolis Vine, Morning Glory, Moonflower, Nasturtium, Scarlet Runner Bean, Sweet Peas and Thunbergia.

Carnations.

Carnations are general favorites because of their rich colors, spicy fragrance and profusion of flowers. All the following varieties do well from seed, but the Marguerite and Chabaud types are the best for summer flowering.



Marguerite Carnations.

ter they will live through the winter and flower early the following summer.

2207. Deep Crimson.....Pkt., 10c.	2210. Fiery Scarlet.....Pkt., 10c.
2208. Sulphur Yellow.....Pkt., 10c.	2211. Striped.....Pkt., 10c.
2209. Bright Rose.....Pkt., 10c.	2212. Pure White.....Pkt., 10c.
2213. Collection of one packet each of the above colors, 50c.	
2214. Mixture of all colors Marguerite Carnations. Pkt., 10c; 1/2 oz., 20c; 1/4 oz., 35c; 1/2 oz., 60c; oz., \$1.00.	

Marguerite Carnations in separate colors. 1/2 oz., 25c; 1/4 oz., 40c; 1/8 oz., 75c; oz., \$1.25.

Giant Marguerite Carnations. An improved strain producing flowers of immense size, frequently measuring 2 1/2 to 3 inches across. Strong, vigorous growers and wonderfully free-flowering.

2215. Mixed Colors. 1/2 oz., 75c; pkt., 10c.

2217. **Centrosema. Butterfly Pea.** A hardy vine of rare beauty, flowering in July from seed sown in April. Flowers range in color from rosy-violet to a reddish-purple, with a broad feathery white marking through the center; inverted pea-shaped; borne in great profusion. Pkt., 10c.

Celosia Cristata. Cockscomb. Free blooming annuals, growing best in light soil not too rich. They make splendid border plants. 2218. Empress. (Colossal size). They have been grown measuring 4 feet from tip to tip, color rich crimson. Pkt., 10c.

2219. Queen of the Dwarfs. This is the best of the dwarf growing Cockscombs. The plants grow only 8 inches high with beautiful dark rose-colored combs, often 2 feet across. Pkt., 10c.

2220. Variegata. Variegated with crimson, orange, green, striped, etc. Three feet. Pkt., 5c. These make fine plants for large beds or groups.

Celosia Plumosa. Feathered Cockscomb. 2221. Thompson's Superb. Of pyramidal growth, attaining a height of a little more than two feet and producing graceful, feathery plumes of the most brilliant crimson. In the sunlight the rich color of the flower spikes is beautifully contrasted with the bronze-colored foliage. Pkt., 10c.

2222. Golden Plume. Bright golden-yellow plumes. Pkt., 10c.

2223. Plumosa, mixed. Feathered. All colors. Pkt., 5c.

Centaurea Imperialis. Sweet Sultan. This is without doubt the most beautiful of all the Centaureas. The beautiful sweet scented, artistic shaped flowers are borne on long, strong stems and when cut will stand for days in good condition. The plant itself is much stronger than any other Sweet Sultan. It is of very easy culture. One of the best annuals for cut flowers.

2225. Alba. Pure white.....large pkt., 10c

2228. Favorita. Rosy lilac.....10c

2230. Splendens. Purplish lilac.....10c

2231. All Colors Mixed. Large pkt., 10c; 1/4 oz., 25c; oz., 75c.



Bidens Dahlioides. Page 58.

Everblooming Chabaud Carnations.

A new strain raised by M. Chabaud, the Carnation specialist of France. The plants are of even height as if trimmed, the stalks are very stiff, the flower is very large, double and deliciously sweet and has the largest and most charming color variation. These usually bloom in five months from the time the seedlings are sown.

2205. Fine Mixed. 3 pkts., 25c; pkt., 10c.

Carnation Grenadin. The best scarlet Carnation for out-door blooming. Comes into bloom very early and the beautiful, double, scarlet flowers are borne in great profusion and are very valuable for bouquets and cut flower use.

2206. Brilliant Double Scarlet. Pkt., 10c.

Marguerite Carnations. This new class of Carnations blooms in about five months after sowing the seed. The flowers are of brilliant colors, ranging through many beautiful shades of red, pink, white, variegated, etc., exquisitely sweet and fully eighty per cent perfectly double. The plants succeed alike in the open garden or in pots. Seeds sown early in the year will give an abundance of flowers in July. Sown in May and kept pinched back, plants will bloom late in the fall until checked by hard frosts. If protected by coarse straw litter they will live through the winter and flower early the following summer.

- | |
|------------------------------------|
| 2210. Fiery Scarlet.....Pkt., 10c. |
| 2211. Striped.....Pkt., 10c. |
| 2212. Pure White.....Pkt., 10c. |

Collection of one packet each of the above colors, 50c.

Mixture of all colors Marguerite Carnations. Pkt., 10c; 1/2 oz., 20c; 1/4 oz., 35c; 1/2 oz., 60c; oz., \$1.00.

Marguerite Carnations in separate colors. 1/2 oz., 25c; 1/4 oz., 40c; 1/8 oz., 75c; oz., \$1.25.

An improved strain producing flowers of immense size, frequently measuring 2 1/2 to 3 inches across. Strong, vigorous growers and wonderfully free-flowering.

2215. Mixed Colors. 1/2 oz., 75c; pkt., 10c.

A hardy vine of rare beauty, flowering in July from seed sown in April. Flowers range in color from rosy-violet to a reddish-purple, with a broad feathery white marking through the center; inverted pea-shaped; borne in great profusion. Pkt., 10c.

Free blooming annuals, growing best in light soil not too rich. They make splendid border plants. They have been grown measuring 4 feet from tip to tip, color rich crimson. Pkt., 10c.

This is the best of the dwarf growing Cockscombs. The plants grow only 8 inches high with beautiful dark rose-colored combs, often 2 feet across. Pkt., 10c.

Variegated with crimson, orange, green, striped, etc. Three feet. Pkt., 5c. These make fine plants for large beds or groups.

Of pyramidal growth, attaining a height of a little more than two feet and producing graceful, feathery plumes of the most brilliant crimson. In the sunlight the rich color of the flower spikes is beautifully contrasted with the bronze-colored foliage. Pkt., 10c.

Bright golden-yellow plumes. Pkt., 10c.

Feathered. All colors. Pkt., 5c.

This is without doubt the most beautiful of all the Centaureas. The beautiful sweet scented, artistic shaped flowers are borne on long, strong stems and when cut will stand for days in good condition. The plant itself is much stronger than any other Sweet Sultan. It is of very easy culture. One of the best annuals for cut flowers.

Alba. Pure white.....large pkt., 10c

Favorita. Rosy lilac.....10c

Splendens. Purplish lilac.....10c

Collection of one pkt., each of above five var's, 40c

All Colors Mixed. Large pkt., 10c; 1/4 oz., 25c; oz., 75c.



Centaurea Imperialis. Sweet Sultan.

Chrysanthemum. Annual varieties. These are showy and effective garden varieties extensively grown for cut flowers. The foliage is ornamental and finely cut. The single varieties grow 12 to 18 inches high and produce on long stems large flowers resembling the Daisy, but of many bright colorings in distinct bands or rings.

2235. Finest Mixed, Single. Pkt., 5c 2239. Double White. Pkt., 5c
2237. Finest Mixed, Double. Pkt., 5c 2240. Double Golden Yellow. Pkt., 5c
See Perennial Chrysanthemum, page 78.

Cineraria. Magnificent and indispensable flowering plants for the conservatory or window garden. The flowers measure 2 to 3 inches across, are of white, blue, violet and crimson shades; usually two or more colors are shown in one flower.

2242. Double Large Flowering, mixed. Pkt., 25c.

Clarkia. Bright and attractive annuals of easy culture. The long graceful sprays are valuable for table decoration. They thrive in sun or shade, growing 2 to 2½ feet high, with masses of double flowers, which all open in water when cut. Double varieties, all colors mixed; oz., 25c; pkt., 5c.

2246. Cleome Pungens. Giant Spider Plant. Grows four to five feet high, strong and sturdy. Flowers borne in abundance, rosy-pink fading to white. Seed pods give the appearance of many legged spider. Used largely in the Minneapolis parks. Very attractive for beds and mass planting. Pkt., 5c.

All flower and vegetable seeds are sent prepaid except where otherwise noted. See page one for general suggestions and parcel post rates.



Cleome Pungens. Giant Spider Plant.

Cobaea Scandens. Cathedral Bells. One of the handsomest and most rapid growing of the annual climbers. Climbs thirty feet in a season. The flowers are bell-shaped. Very prolific and perfectly hardy. The vine is always clean and free from insects.

2245. White, pkt., 10c. 2247. Blue, pkt., 10c. 2249. Mixed, pkt., 10c.

2250. Coccinea Indica. Scarlet-fruited Ivy-leaved. An attractive annual climber of the gourd family. The leaves are smooth, glossy and ivy-like, contrasting beautifully with the snow white, bell-shaped flowers and brilliant scarlet fruit. Pkt., 10c.

2248. Coix Lachryma. Job's Tears. An ornamental grass shiny, pearl-like seeds, used for beads. Plant early in the spring, four or five seeds in a hill, one-half inch deep. Three feet high. Pkt., 5c.

Coleus. The most largely used, perhaps, of all bedding plants. These are easily grown from seed. Plants on page 103.

2251. Mixture of Fancy Fringed Coleus. 2 pkts., 25c; single pkt., 15c.

2252. Mixed Coleus. Tall growing plants of many bright colors. Pkt., 10c.

2268. Cosmidium Burrigeum, Orange Crown. Very handsome new annual, forming elegant, many-branched bushes of 1½ to 2 feet in height. The flowerheads, 1½ to 1¾ inches in diameter, are carried on long, slender, but self-supporting stems well above the graceful, linear foliage. Ray florets golden yellow with a broad conspicuous circle of a rich orange around the disc, a pleasing combination of colors. As the plants produce a constant succession of bloom throughout the summer and the flowers last well in water for days, this novelty will prove to be very useful for cutting purposes. Pkt., 20c.

2270. Cyclamen. Giant Flowered. Charming plants with beautiful foliage and rich colored fragrant flowers. Considered by many to be the finest winter flowering plant we have. Seed may be sown spring or autumn.

The culture of Cyclamen from seed is much more satisfactory than from bulbs. Mixed colors. Pkt. of 15 seeds, 15c.

Culture for Cyclamen. Sow the seed in gentle heat, in shallow boxes or pans filled with a compost of sandy loam, leaf mould and coarse sand. Cover the seed with a light sprinkling of sand, and press the surface lightly with a board. Water carefully and keep at a uniform temperature of 50 to 60 degrees. When the plants have made 2 leaves transplant into small pots.

2272. Cypress Vine. One of the most popular vines with their delicate fern-like foliage and mass of beautiful star-shaped flowers. All colors mixed, oz., 25c; pkt., 5c.

Culture for Cypress Vine. Sow out of doors, when danger of frost is over, in the bed or border where they are to flower. The soil should be well pulverized and the seed covered to a depth of about four times their size. Firm well with a board, thin out the seedlings to prevent crowding.



Northrup, King & Co.'s Extra Early Cosmos.

Northrup, King & Co.'s Extra Early and Mammoth Cosmos.

Cosmos is the showiest of our late summer and autumn blooming annuals. Its graceful flowers borne on long stems, rising above the feathery foliage are very desirable for home or church decoration, lasting a week or more in water. It is a very prolific bloomer and if the plants are given enough space to develop well, will branch freely, every shoot being covered with a mass of lovely flowers. Cosmos is very effective among shrubbery and especially desirable for interplanting with early blooming perennials as it fills in the gaps when the latter die down. It may be transplanted any time until shortly before blooming.

Extra Early Cosmos. The earliest flowering variety in cultivation, blooming fully two months in advance of any other strain known. Seeds sown in open ground, in early May, will produce blooming plants in July, and continue a mass of bloom until killed by frosts. It is the result of painstaking selection from a few plants several years ago, which showed a decided tendency to earliness. This desirable trait is so well established, that instead of a few plants coming early,—as in other early varieties—our Extra Early Cosmos is uniformly so, and will bloom in any part of the North. The plants grow about four feet tall.

2262. Northrup, King & Co.'s Extra Early. All colors, mixed, pkt., 10c.

2263. Extra Early. Crimson. Pkt., 10c. 2265. Extra Early. Rose, most pleasing color of all. Pkt., 10c.

2266. Extra Early. White. Pkt., 10c.

2267. Collection. Packet each of three colors, 25c.

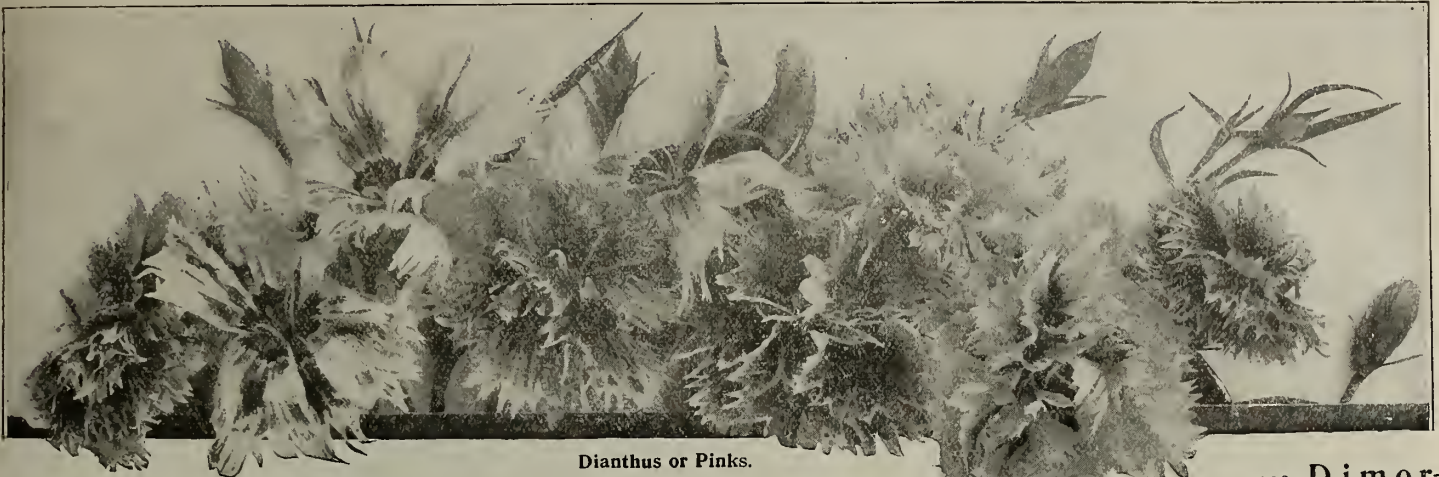
2254. Dawn. This variety comes into flower in July, growing from 4 to 5 feet high. The flowers are large, the color a beautiful white, relieved by a delicate tint of rose at the base of the petals. Pkt., 10c.

Mammoth Cosmos. The following varieties of Cosmos usually do not start blooming until several weeks after the Extra Early sorts, consequently they are sometimes nipped by early frost. To insure success therefore, it is best to start all Mammoth varieties in-doors in early April, later transplanting them to the garden when danger of frost is over. By this method they start to bloom in good season and the very large flowers well repay the extra trouble.

2255. Mammoth Crimson. Pkt., 10c 2259. Mammoth White. Pkt., 10c
2257. Mammoth Pink. Pkt., 10c 2261. Mammoth Yellow. Pkt., 10c



Giant Flowered Cyclamen.



Dianthus or Pinks.

Dahlia. Dahlias can be grown easily from seed so as to produce flowers the first year. This is as true of double Dahlias as of single. In the Dahlia are combined more desirable qualities than are found in almost any flower grown in the open ground. It can be had in perfection from June until cut down by frosts. In it can be found not only every imaginable color except blue, but the most beautiful combination of colors and marvelous blending of shades and tints imaginable. As a cut flower the Dahlia is unsurpassed, owing to its great diversity of bloom and the brilliant luster of its colorings.

2275. Northrup, King & Co.'s Sterling Mixed Dahlia. (Sold only in sealed packages.) This mixture is intended to embrace seed of every desirable Dahlia procured from the most prominent Dahlia specialists of this and other countries, and blended by us. Full directions for culture (which is of the very easiest) sent with every packet. Pkt., 15c; 3 pkts., 35c.

2276. Twentieth Century or Orchid Flowered Dahlia. In size the flowers are giants, $4\frac{1}{2}$ to 7 inches across, and in color vary from almost pure white to deep crimson. These large single flowers are truly magnificent. Pkt., 15c.

2277. Double Cactus Dahlia. Very desirable; many colors. Pkt., 15c.

2278. Double Dahlia. Very large flowering, fine mixed. Pkt., 15c.

2279. Single Mixed Dahlia. All colors. Pkt., 10c.

For Dahlia roots see pages 100 and 101.

2282. Datura. Angel's Trumpet. Showy, large, branching plants growing 5 to 6 feet high, bearing large trumpet-shaped flowers, 6 inches in length and very fragrant. Mixed seeds of all varieties, pkt., 5c.

Dianthus or Pinks. One of the most popular and magnificent flowers in cultivation, producing a great variety of brilliant colors and profusion of bloom. The annual varieties may be sown out of doors when danger from frost is past and in a few weeks time they are a mass of bloom, continuing so until frost. 1 foot.

2283. Double Annual Pinks, Mixed. A fancy mixture of beautiful varieties. Oz., 60c; pkt., 5c.

2284. Dianthus. Double Lucifer. This new annual Pink represents the double flowered form of the Dianthus Vesuvius. The nicely fringed double flowers, $1\frac{3}{4}$ to 2 inches across, are of an intense orange-scarlet, a dazzling color in full sunshine and the most striking of all red flowered annual Pinks. The plants grow 12 to 15 inches high and may advantageously be used for effective flowerbeds. We are certain that the flowers of this new variety will be of the same great value and importance for cutting among the annual Pinks, as the bright scarlet flowered variety "Grenadin" has attained among Carnations. Pkt., 25c.

2285. Single Annual Pinks, Mixed. A beautiful mixture of all the single varieties. Oz., 50c; pkt., 5c.

2286. Hardy Garden Pinks. Fancy mixed. Contains all the desirable colors. $\frac{1}{4}$ oz., 50c; pkt., 15c.



DATURA

2290. Dimorphothea

Aurantiaca. Orange

African Daisy. A rare and extremely showy annual Daisy from South Africa which thrives under our climatic conditions perfectly, and we expect it to become a favorite. The bushy plants grow 12 to 15 inches high. The flowers, $2\frac{1}{2}$ inches across, are a unique, rich, glossy orange-gold, with dark disc and these glitter in the sunshine and present a magnificent sight. Seed may be sown in the same way as Asters and should have a sunny position. They bloom the greater part of summer and fall. Pkt., 25c; 5 pkts., \$1.00.

Dolichos. Hyacinth

Bean. A rapid growing and free-flowering annual climber. The seed pods which follow the flower are very ornamental for covering arbors, trellises, etc. After danger of frost is over, sow the seeds where they are to remain. The soil should be well pulverized and the seed covered to a depth of about 4 times their size. Press down firmly with a board, and thin out so that the plants will not become crowded. For early flowering they should be sown indoors in a shallow box, and transferred to the open ground when the weather becomes suitable.

2292. Daylight. Early becomes covered with spikes of snow white, pea-shaped blossoms, which continue until late in fall. 3 pkts. for 25c; pkt., 10c.

2293. Darkness. Identical with "Daylight" except in color, which is a rich purple violet. 3 pkts. for 25c; pkt., 10c.

2294. Lablab. Mixed purple and white. Oz., 20c; pkt., 5c.



DIMORPHOTHECA AURANTIACA



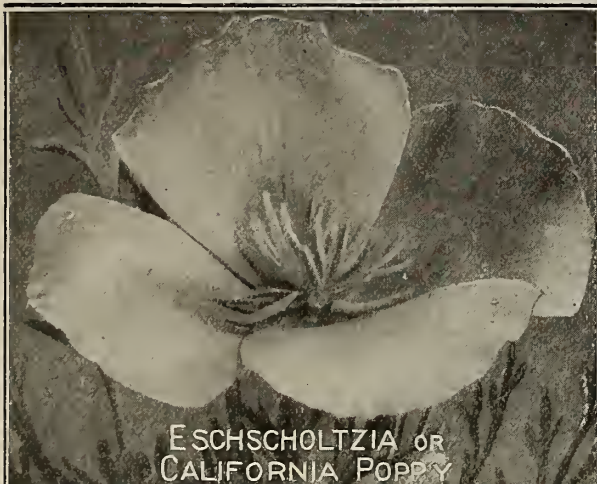
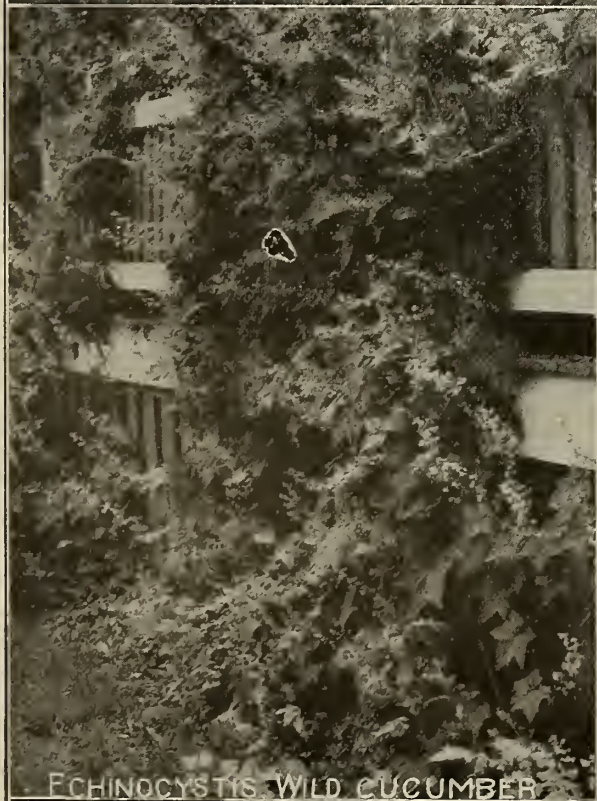
DOLICHOS



GAILLARDIA



HELIANTHUS. SUNFLOWER

ESCHSCHOLTZIA OR
CALIFORNIA POPPY

ECHINOCYSTIS WILD CUCUMBER

2295. Echinocystis. Wild Cucumber Vine. A well known vine, common in many sections, and the quickest climber known for covering verandas, old trees and houses, trellises, etc., never suffering from the heat but retaining its fresh and lively green color; never infested with insects, and very profuse in bloom. It will sow itself and come up in the same place. Sow seed in fall. Pkt., 5c; oz., 20c.

Eschscholtzia. California Poppy. The California Poppy is a showy, free-flowering plant so popular with everyone as to scarcely need introduction. Particular attention is drawn to *Hunnemannia* often called Bush Eschscholtzia, offered on page 63. This is a beautiful herbaceous perennial, which flowers freely the first year and bears a great abundance of brilliant yellow tulip-shaped flowers. Do not overlook this beautiful variety in placing your orders.

2300. Golden West. Bright yellow with large rayed blotches of deep orange at base of petals. Oz., 25c; pkt., 5c.

2301. Mandarin. Inner side of the petals rich orange, outer side brilliant scarlet. Oz., 30c; pkt., 5c.

2302. Rose Cardinal. Large flowers of intense carmine. Oz., 40c; pkt., 10c.

2303. All Colors, Mixed. Oz., 25c; pkt., 5c.

2305. Fuchsia. Double and Single Mixed. Fuchsias are as easily grown from seed as from cuttings, and from seed many new varieties are obtained. They will flower freely the first year in the open ground, while the plants can be taken in the house in the winter, where they will flower still more freely. Pkt., 25c.

Gaillardia. Blanket Flower. Remarkable for the profusion, size and brilliancy of their flowers, continuing in bloom from early summer until November. Excellent for borders or for cutting.

2307. Picta Lorenziana. A charming, profuse, double flowering strain. Beautiful mixed colors. $\frac{1}{4}$ oz., 20c; pkt., 5c.

2308. All Annual Varieties Mixed. Oz., 30c; pkt., 5c.

Perennial Varieties. See page 78.

Geranium. Comparatively few are aware that Geraniums may be grown easily from seed and flower the first season if sown early. This is the best way to secure Geraniums as they will frequently reward the cultivator with charming new varieties. In fact, propagation by seed is the only way to obtain new varieties. See page 103 for plants.

2310. Zonale, Mixed. A superb strain of the largest and finest varieties. Pkt., 10c.

2311. Pelargonium, Mixed. (Lady Washington.) Saved from the finest fancy and spotted large-flowering sorts. Pkt., 25c.

2312. Globe Amaranth. Gomphrena. A dwarf hardy annual, with pretty clover-like heads of purple, white and red flowers. 12 inches. Flowers can be dried and used in winter bouquets. Finest mixed, reddish-purple and white. Oz., 25c; pkt., 5c.

2313. Gloxinia. Hybridia Grandiflora. The Gloxinia is one of the most beautiful flowers, very few possessing the depth of color peculiar to this superb genus. An unsurpassed strain, containing the spotted Hybrids as well as the finest self-colored sorts. Pkt., 25c.

2317. Gourds. Ornamental. Mixed Varieties. Oz., 15c; pkt., 10c. See page 27.

Helianthus. Sunflower. Hardy annuals, of sturdy growth, remarkable for the size and brilliancy of their flowers. Very useful as cut flowers. Effective in forming background of large beds or borders and for distant effect.

2325. Chrysanthemum Flowered. Perfectly double; the color is the brightest golden yellow. The flowers are so perfect in form that they resemble very much double Chrysanthemum-flowered Asters with long stems; grows seven feet high and bears profusely all summer long. Pkt., 5c.

2326. Cucumerifolius. MINIATURE SUNFLOWER. Single, rich golden yellow, with black center. An abundant bloomer, of branching habit, coming into flower in July and continuing until frost. 4 feet. Pkt., 5c.

2327. Giant Russian. Immense single flowers, yellow with large black center. 6 feet. Pkt., 5c.

2328. Orion. Very effective sort, particularly on account of its twisted petals, which resemble a Cactus Dahlia. Pkt., 10c.

2329. Perkeo. This is a beautiful dwarf variety of the miniature Sunflower. The plants form compact bushes about 12 inches high and about 15 inches through. Very useful for the front of borders or beds of plants of medium height. Flowers continually from early July until cut down by killing frost. Single; charming golden yellow, with black center. Pkt., 10c.

2330. Cut and Come Again Sunflowers; Single and Double in a beautiful mixture of all varieties. You will be delighted with these, flowering as they do from June until killing frost. Indispensable as cut flowers and also very popular for garden decoration. Oz., 25c; pkt., 10c.

See page 81 for perennial Sunflowers.

All flower and vegetable seeds sent prepaid except where otherwise noted.



2315. Godetia. An attractive, hardy annual deserving more extensive cultivation. The plants bloom profusely and bear showy flowers of rich and varied colors. 1 foot. All Colors, Mixed Oz., 30c; pkt., 5c.

2318. Grasses. Ornamental. For large beds or groups on lawns nothing gives a finer effect. 12 Varieties, Mixed. Pkt., 10c.

2320. Gypsophila. Bridal Veil. Baby's Breath. *Elegans alba grandiflora.* Beautiful free-flowering plant, hardy annual of easy culture. Pure white, flowering in panicles; very useful in making up bouquets. Pkt., 5c. See page 78 for perennial variety.

Helichrysum. Everlasting. Large, double, daisy-like blooms, produced in shades of yellow and scarlet. Frequently dried and used for winter bouquets. Flowers should be gathered when on the point of expanding. 2 to 2½ ft. **2322. Giant Double Mixed.** Pkt., 5c.

2332. Heliotrope. Is a universal favorite on account of its delightful fragrance and long duration of bloom, flowering equally well as bedding plants in summer or as pot plants in the house in the winter. It is not generally known that Heliotrope may be raised from seed as easily as the Verbena. The best varieties in mixtures at 15c a pkt.; 2 pkts. for 25c. For plants see page 103.

Hollyhocks, Everblooming Annual. A comparatively new class of easy culture and flowering as quickly from seed as any garden annual. The plants from early sown seed set out in May begin flowering in July; the May sown in August; but in either event they flower profusely until frost. The plants are vigorous in growth and naturally branching in habit, and if given the best of treatment will thrive luxuriantly. The soil should be very rich, deeply dug, and during dry weather watered liberally. The diversity of forms and colors is delightful. There is a great variety of colors and color combinations in this strain, including maroon, pink, rose, crimson, white, cerise, scarlet and many variegations, of dainty and exquisite blending. See page 84.

2335. Double and Semi-Double Mixed. Pkt., 15c; 250 seeds, 50c.

2337. Single Mixed. Pkt., 15c; 250 seeds, 50c.

2340. Humulus Japonicus. Japanese Hop. One of the most rapid climbers grown; seed can be sown in the open ground in the spring and it will attain enormous dimensions very quickly. The foliage is luxuriant, and it is one of the best plants for covering verandas and trellises. Heat, drought and insects do not trouble it. See illustration on page 64. Pkt., 10c.

2342. Hunnemannia. Giant Yellow Tulip Poppy or Bush Eschscholtzia. Flowers are a rich shade of buttercup yellow, with feathery glaucous foliage. The best of the Poppy family for cut flowers, remaining in condition for several days. Seeds sown in May will produce flowering plants in July, which blossom continuously until hard frost. Pkt., 10c; ¼ oz., 20c; oz., 50c.

Impatiens Holstii. Charming plants for the decoration of the house or dinner table producing bright, waxy flowers profusely and continuously.

2345. Dwarf Vermilion Orange. Dwarf compact growing variety of the attractive Impatiens Holstii. A very beautiful plant. It forms regularly branched bushes, from 6 to 8 inches in height by 10 to 12 inches in breadth, and produces its lovely, bright vermilion orange flowers in the greatest profusion throughout the season. Foliage and stem light green. Planted out of doors in a half-shady situation or grown in pots, this dwarf variety will always be very effective and showy. Pkt., 25c.

2347. Dwarf Deep Scarlet. Another dwarf variety with dark foliage and stems; flowers about an inch across, of a beautiful deep scarlet. Equally as useful as the preceding sort. Pkt., 20c.

2350. Kochia. Summer Cypress or Mexican Fire Bush. An easily grown annual, which sown thinly in spring soon forms a cypress-like hedge of lively green and of perfect symmetry; it attains a height of about 3 feet, and on the approach of autumn the whole plant becomes a deep red; a splendid plant to divide the vegetable from the flower garden, or for forming a hedge for the summer for any purpose. See illustration on page 64. Pkt., 10c.

2352. Lantana. Well known bedding plants, with clusters of Verbena-like flowers, producing pink, yellow, orange and white heads in great abundance. They have an agreeable aromatic perfume. Mixed, pkt., 5c.

Larkspurs. This is one of the best known garden flowers. A vast improvement has been effected, by careful selection and attentive cultivation, in size and color of the blossoms and the general habit of the plant. Hardy annuals. (For Perennial Larkspurs see Delphinium, page 78.)

2353. Dark Blue. Pkt., 10c.

2354. Shell Pink. Pkt., 10c.

2357. Finest Mixed. All colors. Pkt., 5c.

2358. Collection. Packet each of the four colors, 30c.

Lavatera. Annual Mallow. The soil should be well pulverized and the seed covered to a depth of about 4 times their size.

2359. Trimestris grandiflora rosea. A very beautiful and showy annual, growing about 2 feet high and covered during the entire summer with large, cup-shaped, shrimp-pink flowers; in a border or bed the effect is very bright. Sow in May where they are to bloom and thin out to 12 inches apart. Pkt., 5c.

2360. Linum. Crimson Flax. One of the most effective and showy bedding plants. Flowers brilliant scarlet. Pkt., 5c.





HUMULUS
JAPANESE HOP



MIGNONETTE



KOCHIA BURNING BUSH

2362. Lupins. Annual Mixed. Very desirable garden plants, showy and excellent for cutting. Graceful spikes, 2 feet long, in various shades of white, blue, pink and yellow. Oz., 20c; pkt., 5c. (See Lupinus or Perennial Lupins page 80.)

2363. L. subcarnosus. A fine border plant, producing handsome spikes of the deepest sea-blue flowers; delicately fragrant. Hardy annual. Pkt., 10c.

Marigolds. Well known garden favorites of quick growth and very free-flowering habit. Seed should be sown in shallow drills in the open garden early in the spring after danger of frost is over and the trees are well out in leaf. Plants for early blooming may be started from seed sown in boxes, placed in a sunny window in March, and the young plants grown in pots until the weather is warm enough to set them outdoors.

2364. French Marigold. These are dwarf, compact plants, very attractive, each being covered with hundreds of small bright flowers. Mixed—embraces all the best varieties, including Gold Striped, Legion of Honor, etc. Oz., 30c; pkt., 5c.

2365. African Marigolds. Plants grow 2½ feet high and produce large double flowers 2½ to 3 inches in diameter of glowing colors, in great profusion.

2367. Mixed; includes Eldorado, Gold Nugget, Lemon Queen, Orange Prince, etc. Oz., 30c; pkt., 5c.

2370. Marvel of Peru. Four O'Clocks. A well known, handsome, free-flowering where, fine mixed colors; 2 feet. Oz., 15c; pkt., 5c. ing garden favorite; does well every-

2372. Matthiola Bicornis. Evening Scented Stock. No annual in cultivation equals this in delicate perfume of its flowers. The pink and lilac blossoms partly close during the day but expand and impart their fragrance in the evening. Include a packet or two of Evening Scented Stock with your order. You'll not regret it. Oz., 25c; pkt., 10c.

Culture for Matthiola Bicornis. Sow out of doors, when danger from frost is over, in the bed or border where they are to flower. The soil should be well pulverized and the seed covered to a depth of about 4 times their size. Press down firmly with a board, and thin out so that the plants will not become crowded. For early flowering sow in-doors in a shallow box, or hot-bed, and transfer to the open ground when the weather becomes suitable.

2374. Matricaria Eximia. Feverfew. The plant is covered with numerous and freely branching flower stems which are literally covered with very double, pure white flowers, 1 inch in diameter. Pkt., 5c.

2375. Maurandia. Beautiful, rapid climber, blooming profusely until late in autumn; also fine for conservatory or greenhouse; if desired for the house, take up before the approach of frost. Half hardy perennial, flowering the first season if sown early; 10 ft. Mixed colors. Pkt., 10c.

Mignonette. Reseda. A well-known fragrant favorite, and no garden is complete without a bed of Mignonette. Sowing made in April and again in July will keep up a succession from early summer till frost.

Culture. Sow out of doors, when danger from frost is over, in the bed or border where they are to flower. The soil should be well pulverized and the seed covered to a depth of about 4 times their size. Press down firmly with a board, and thin out so that the plants will not become crowded. For early flowering they should be sown indoors in a shallow box, or in a hot-bed, and transferred to the open ground when the weather becomes suitable.

2376. Sweet Scented. Reseda Odorata. The old-fashioned variety with small spikes, but the most sweetly scented of all. Oz., 15c; pkt., 5c.

2377. Golden Machet. Distinct variety of Machet, differing from the type by its massive spikes of golden yellow blossoms. Pkt., 10c.

2378. Mile's Hybrid Spiral. Of strong branching habit, with spikes from 8 to 10 inches long; very fragrant. Oz., 25c; pkt., 5c.

2379. Improved Red Victoria. Fine spikes of brilliant red. A most useful and desirable variety. Pkt., 5c.

2380. Large-Flowering Pyramidal. Flowers large, of a reddish tint; a good variety for the open ground. Oz., 25c; pkt., 5c.

2381. Machet. Adapted for pot culture; dwarf pyramidal growth, bearing numerous flower stalks; highly colored and very fragrant. Oz., 75c; ¼ oz., 25c; pkt., 10c.

2382. Parson's White. Large spikes, pure white, very fragrant. Oz., 40c; pkt., 5c.

2383. Salmon Queen. Strong, robust habit, with fine spikes, of bright salmon-red flowers, intensely fragrant; fine for outdoor culture. Oz., 50c; pkt., 10c.

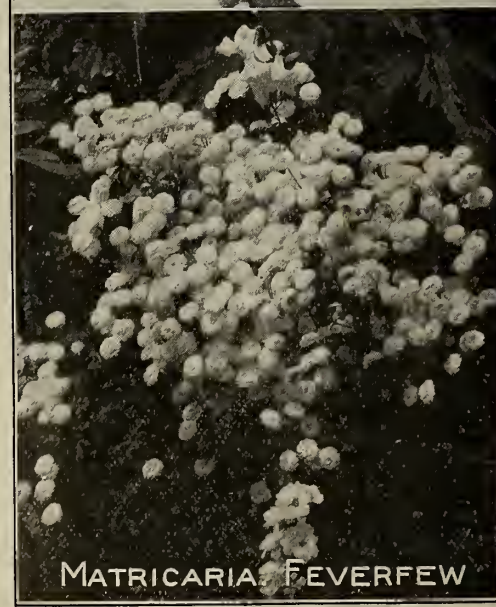
2385. Minneapolis Vine. Pilogyne Suavis. We are glad to be able to offer the seeds of which we have sold for years, to the delight of thousands who have bought them. The foliage is most elegantly cut and of a shiny, dark green. The flowers are small, white and sweet-scented, exhaling a musk-like perfume. This vine is of easy culture, rapid growth, and especially adapted for covering trellises. This is the most beautiful vine of which we have knowledge. Pkt., 15c; 2 pkts., 25c.

List of Annual Climbing Vines from Seed. Balloon Vine, Canary Bird Vine, Cobaea Scandens, Coccinea, Cypress Vine, Dolichos, Gourds, Japanese Hop, Maurandia, Moonflower, Morning Glory, Nasturtium, Sweet Peas, Thunbergia.

List of Plants from Seed, Succeeding in Partial Shade. Anemone, Antirrhinum, Aquilegia, Tuberosus Begonia, English Daisy, Canterbury Bells, Coreopsis, Delphinium, Digitalis, Linum, Matricaria, Mimulus, Myosotis, Oenothera, Pansy, Hardy Poppies, Violet.



AFRICAN MARIGOLD



MATRICARIA FEVERFEW

Morning Glory. Convolvulus. One of the most free flowering and rapid growing climbers, thriving in almost any situation. The flowers are very delicate, brilliant and beautiful.

2387. Japanese Improved or Giant Mikado Morning Glory. The flowers are of gigantic size, and the colorings and markings beyond description, ranging from snow-white to black-purple, with all the possible intermediate shades. Others are edged with white, having throats of one of the above colors; there is also an endless number having flowers spotted, marbled, striped, flaked and splashed. They are beyond question the largest and most beautiful of this handsome family of easy grown climbers and are the Orient's best gift to flower lovers. Wherever climbers can be grown, our New Giant Mikado Strain should have a prominent place. The seed we offer is of our own importation direct from Japan and embraces plain singles, (which are really the handsomest), semi-doubles, quilled and frilled, crimped and scalloped, and double. Oz., 25c; pkt., 10c.

2390. Tall Morning Glories Mixed. A great variety of colors of the old-fashioned, popular, rapid growing climber. Oz., 15c; pkt., 5c.

2391. Double Flowering Morning Glories. A very large percentage of the seedlings will produce double flowers. Oz., 40c; pkt., 10c.

2392. Dwarf Morning Glories Mixed. Hardy annual, 1 foot in height. Colors range from pure white to deep purple. Oz., 15c; pkt., 5c.

2395. Moonflower. Bears lovely white flowers 5 to 6 inches in diameter, with a fine painted star in the center. The flowers open at dusk, or earlier on cloudy days, at which time they are deliciously fragrant. Start the seed in the house and set out as early as safe in the spring. Pkt., 10c.

2402. Nicotiana Affinis. Tuberose-flowered Tobacco. Delightfully sweet-scented, pure white tubular flowers, blooming continually; annuals, 2 to 3 feet. Pkt., 5c.

2404. Nicotiana

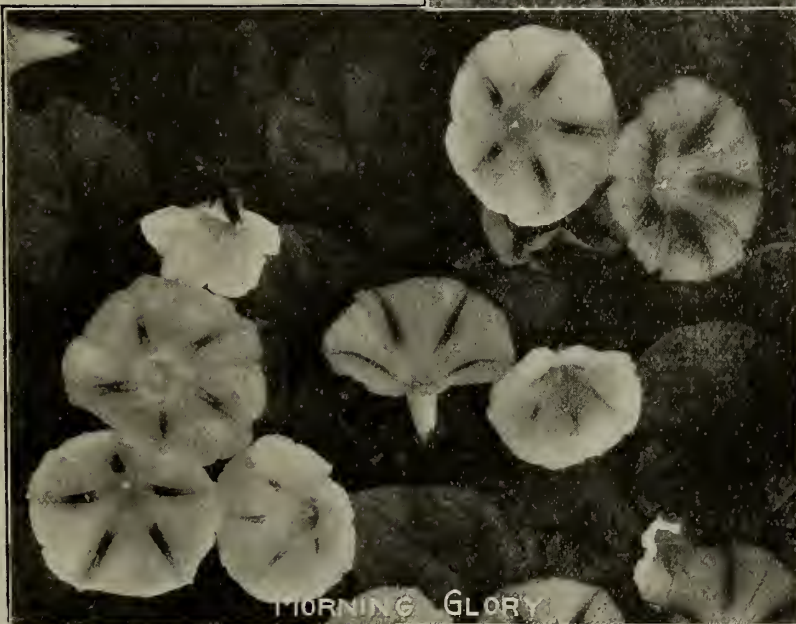
Sanderæ.

Carmine Tuberose Flowered Tobacco. This beautiful hybrid Nicotiana has been spoken of as a most strikingly beautiful plant. The originators describe it as forming bushy much-branched plants, 2 feet high, the whole plant laden with flowers from base to summit—literally ablaze with handsome carmine-red, fragrant blossoms, thousands of which are produced on a single plant. In form the flower resembles Nicotiana Affinis, but having a short, stout tube, and, unlike that variety, does not close up in daytime, but remains open all day; the fragrance, while not so powerful as Nicotiana Affinis, is decidedly delicious. It is as easy to grow as Petunia. If started indoors in early spring and planted out in May it gives a continuous display of blooms all summer and autumn. It can also be sown in warm ground. Pkt., 15c.

Book on Flowers and How to Grow Them. By Eben E. Rexford. Price, 50c, (postpaid, 55c).



NICOTIANA AFFINIS



MORNING GLORY

2405. Nicotiana Sanderæ Hybrids.

A splendid type in a great diversity of color. All colors mixed; pkt., 15c.

2407. Nigella Damascena.

Love in a Mist, or Devil in the Bush. A compact, free-flowering plant, with finely cut foliage, curious-looking flowers and seed pods; of easy culture, growing in any garden soil; hardy annual; blue and mixed; 1 foot. Oz., 25c; pkt., 5c.

2409. Nemophila.

Splendid free-flowering hardy annuals, of very neat, compact habit. Flowers are cup-shaped, appearing in many brilliant colors, the blue shades being particularly striking. Blossom continuously throughout the summer, thriving best in a cool, or moist, shady place where the soil is not too rich. All colors mixed, with many shades of blue. Oz., 25c; pkt., 5c.

Culture for Nemophila. Sow out of doors, when the danger from frost is over, in the bed

or border where they are to flower. The soil should be well pulverized and the seed covered to a depth of about four times their size. Press down firmly with a board and thin out so that the plants will not become crowded. For early flowering they should be sown indoors in a shallow box, or in a hot-bed, and transferred to the open ground, when the weather becomes suitable.

2410. Ceanothus. Evening Primrose.

Beautiful, low-growing plant, producing large, silvery-white, rose and yellow flowers. They thrive best in a sunny position, but succeed in almost any situation or soil. Annual varieties; all colors mixed. Pkt., 5c.

Oxalis.

Beautiful small plants, suitable for the greenhouse, rock-work, or outdoor culture; flowering the first year; half hardy perennials; 9 inches.

2412. Alpha. White. Pkt., 10c.

2413. Rosea. Rose-colored. Pkt., 10c.

2415. Tropaeoloides. Excellent, dwarf bedding plant with dark brown foliage, forming a dense mat; flowers deep yellow but inconspicuous. Height 4 inches; pkt., 5c.

A Sheet of Bloom.

Your flower seeds are hard to beat. My yard is a sheet of bloom today. Petunias, Dahlias, Cosmos and Clematis are blooming now. The garden seeds were simply immense. Lettuce, radishes, tomatoes and cucumbers; all Sterling brand, were fine.

Worth Their Weight in Gold.

I cannot praise your seeds too highly. They are the finest I ever used; worth their weight in gold. JOHN WEBER, Brooklyn, N. Y.

Book on Greenhouse Construction. By L. R. Taft. Various styles of greenhouse and plant house structures, also heating, ventilating, etc. Price, \$1.50, (postpaid, \$1.65).

Book on Home Floriculture. By Eben E. Rexford. A new and practical guide to the treatment of flowering and ornamental plants in the house and garden. Price, \$1.00, (postpaid, \$1.10).

Parsons on the Rose. By S. B. Parsons. Propagation, culture, training, classification and description. Price, \$1.00, (postpaid, \$1.10).

Iris Manual. By C. S. Harrison. Price, 25c, postpaid.

Paeony Manual. By C. S. Harrison. Price, 25c, postpaid.



NIGELLA. LOVE IN A MIST

NASTURTIIUM

Northrup, King & Co.'s Mixtures of Nasturtiums

For ease of culture, duration of bloom, brilliancy of coloring and general excellence nothing excels Nasturtiums. All they need is a moderately good soil in a well-drained, sunny position, and within a few weeks from the time they are sown until hard frost comes there is an endless profusion of their gorgeous blossoms. No annual will produce such a lavish profusion of flowers for so long a time, with the same small outlay of time and labor. The maximum of bloom is produced in light or sandy soils and seldom diminishes through the hot weather. The varieties offered below were selected from a very large number of sorts as the best and most distinct.



It is our intention that every package of seed, large or small, that bears the name of Sterling, shall be the best; that money can procure anywhere at any price. Our mixtures of Dwarf and Tall Nasturtiums are shining examples of Sterling excellence as applied to flower seeds. These mixtures are made up by ourselves from the finest named varieties grown by the leading specialists of England, France, Italy, Germany and America. They embrace every desirable color, such as deep brown, red, golden-orange, flaming scarlet, chrome-yellow veined with carmine, burnished bronze color, crimson-scarlet, sulphury-yellow, spotted deep chocolate, light straw, delicate shades of rose and many other colors, tints and markings.

Our Sterling Mixture of Tall Nasturtiums should not be confounded with the common type, as the varieties in this mixture are mostly of the rich and velvety Lobb varieties. In this mixture are also included all the choicest colors of the climbing varieties, including the new Madam Gunther Hybrids and Chameleon sorts. The color combinations in the flowers are superb, a wealth of rich maroon, crimson, scarlet, magenta and claret shades, marbled and mottled, streaked, spotted and splashed with white, cream, pink and rose. These climbing Nasturtiums are especially adapted for covering verandas, trellises, trees, stumps, etc.

2420. Northrup, King & Co.'s Sterling Mixture of Dwarf Nasturtiums. Pkt., 5c; oz., 15c; ¼ lb., 50c; lb., \$1.50.

2425. Northrup, King & Co.'s Sterling Mixture of Tall or Climbing Nasturtiums. Pkt., 5c; oz., 15c; ¼ lb., 50c; lb., \$1.50.

2430. Dwarf Nasturtium, Choice Mixed. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

2440. Tall or Climbing Nasturtium, Choice Mixed. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

Nasturtium Novelties.

2545. Tall Ivy-Leaved Mixture. The plants are of running growth, with star-like pointed leaves of rich green, veined with white, so that the young shoots, where the leaves are set quite closely together, have a marked resemblance to the foliage of the hardy English Ivy. The flowers are of medium size and of most distinct form. The petals are quite narrow, and standing well apart present a striking star-like appearance. Pkt., 10c; oz., 25c.

2550. Dwarf Ivy-Leaved Mixture. A beautiful mixture, containing a remarkable range of color, including many not usually found in any other strain of Nasturtiums. Pkt., 10c; oz., 25c.

2520. Dwarf Golden Foliage Mixture. A charming novelty of unusual beauty, the contrast between the clear golden yellow foliage and the flowers being most remarkable. This mixture contains all colors originated to date. Pkt., 10c; oz., 25c.

2530. Variegated Foliage Queen of Tom Thumbs Mixed. The colors range from the deep crimson of parent to yellow, buff and spotted; of fine form and of the largest size. Very effective, forming a fine contrast to the silver variegated or cream and green colored leaves of the foliage. Useful for growing as single plants among other flowers, for edging walks, or surmounting walls. Very showy and a decided novelty of most surpassing beauty. Pkt., 10c; oz., 30c.

2542. Variegated Foliage Tall or Trailing Queen Mixed. A fine mixture of this charming new variety, containing all colors so far originated. The flowers are of many bright colors in pleasing contrast to the variegated blotched and spotted foliage. Pkt., 10c; oz., 30c.

Dwarf Lilliput Nasturtiums. A charming type of compact, dwarf growth. Very desirable for pot culture or for borders around beds. The color combinations are brilliant and beautiful. Our mixture contains many shades.

2552. Lilliput Mixed. Pkt., 5c; oz., 15c; ¼ lb., 50c; lb., \$1.50.

Culture. Sow in-doors in early April, transplant to sunny border the end of May. If planted out-doors sow in early May. Light sandy loam suits them best. One oz. of seed sows a 15 foot row.

Northrup, King & Co.'s Named Varieties of Nasturtiums.

Tom Thumb, Dwarf or Bedding Nasturtiums.

Price; any of the following varieties; pkt., 5c; oz., 15c; ¼ lb., 40c.

- 2450. Aurora. Primrose, veined carmine-pink.
- 2452. Beauty. Yellow with scarlet veinings.
- 2454. Bronze. Bronzy-orange.
- 2456. Chameleon. Various colors on one plant.
- 2458. Cloth of Gold. Scarlet, yellow foliage.
- 2459. Crystal Palace Gem. Sulphur, maroon blotches.
- 2460. Dark Leaved Varieties, mixed.
- 2461. Empress of India. Fiery crimson, dark foliage.
- 2462. King of Tom Thumbs. Dark scarlet, dark leaves.
- 2463. King Theodore. Crimson, shaded maroon.
- 2464. Lady Bird. Orange-yellow, suffused with red and a bright red blotch at base of petals.
- 2465. Pearl. Creamy-white.
- 2466. Regelianum. Deep purplish-crimson.
- 2467. Rose. Soft rose color.
- 2468. Ruby King. Crimson-rose.
- 2469. Spotted. Rich orange, spotted crimson.
- 2470. Spotted Varieties.
- 2471. Vesuvius. Salmon-rose, dark foliage.

Tall or Climbing Nasturtiums.

Elegant climbers for verandas, trellises, etc. Useful to cover unsightly railings and trails over rough ground with fine effect. Gather seed pods for pickling while green and tender. 6 to 10 feet.

Price; any of the following varieties:—pkt., 5c; oz., 15c; ¼ lb., 40c.

- 2475. Chameleon. Various richly colored flowers on the same plant.
- 2476. Crimson. Rich and velvety.
- 2478. Chocolate. Very odd and unique shade.
- 2480. King Theodore. Maroon, dark foliage.
- 2481. Lemon Yellow. Clear yellow, red veins.
- 2482. Lilac. Heliotrope-lilac.
- 2483. Orange. Pure orange.
- 2484. Pearl. Creamy-white.
- 2485. Purple. Rich purplish-crimson.
- 2486. Rose. Ruby rose.
- 2487. Scarlet. Brilliant shade of vermillion.
- 2488. Scarlet and Gold. Scarlet; foliage yellow.
- 2490. Vesuvius. Lovely salmon-pink.
- 2492. Ivy-leaved. Useful for hanging baskets and vases. A beautiful sort with deep green ivy-like foliage, forming a striking contrast to the crimson-scarlet flowers. Pkt., 10c; oz., 25c.

Lobb's Climbing Nasturtiums.

Not to be confounded with the common tall Nasturtiums, far surpassing them in the remarkable brilliancy of the flowers. These are much larger than those of the old-fashioned kind, and usually the petals overlap. Climbing Nasturtiums are especially adapted for covering verandas, trellises, etc.

Finest mixed colors. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00.

Price; any of the following varieties; pkt., 5c; oz., 25c.

- 2495. Asa Gray. Primrose yellow, almost white.
- 2496. Atropurpureum. Deep crimson.
- 2498. Brilliant. Dark scarlet.
- 2500. Crown Prince of Prussia. Deep blood-red.
- 2502. Giant of Battles. Sulphur, blotched-red.
- 2504. Ivy-Leaved. Fine deep blue-green, ivy-like foliage, dark blood-red fringed flowers.
- 2506. Lilac. Odd shade of brownish-lilac.
- 2508. Princess Victoria Louise. Creamy-white, with conspicuous orange-scarlet blotches.
- 2509. Regina. Brilliant salmon-red on opening, changing as they age to almost a cream color.
- 2510. Roi Des Noirs. (King of the Blacks) Deep velvety garnet; very rich.
- 2511. Spitfire. Brilliant scarlet.

NORTHROP, KING & CO.'S GIANT FLOWERING PANSIES.

	Pkt.		Pkt.
2580. Adonis. Light blue with a white centre.....	10c.	2595. Golden Five Spotted. Strikingly handsome.....	15c.
2582. Auriculaeffora. Superb mixed metallic shades.....	10c.	2596. Golden Yellow. Dark eye.....	10c.
2583. Canary Yellow. Dark eye. Large beautiful yellow with 3 black blotches on frilled petals.....	15c.	2598. Light Blue. Azure blue with dark eye.....	10c.
2584. Cardinal. Of all so-called scarlets this is the nearest to a bright red.....	10c.	2599. Lord Beaconsfield. Deep purple violet, shading to white on upper petals.....	15c.
2585. Comet. White porcelain with fine blue or violet stripes on lower petals.....	10c.	2601. Mme. Perret. Various shades of pink and rose. Very free flowering, extra large.....	10c.
2587. Emperor William. Ultramarine blue with large blotches of violet.....	15c.	2603. Peacock. Upper petals steel blue, remainder are deep claret with white margins. Very striking.....	15c.
2588. Emperor Frederick. Deep purple with golden bronze centre, edged scarlet and yellow.....	15c.	2604. Pres. Carnot. Pure white with five deep violet blotches.....	10c.
2589. Eros. Velvety chestnut, with broad golden border.....	10c.	2605. Pretiosa. Purple blotch on crimson back ground, pure white edge. Large flowered, curled.....	10c.
2591. Faust or King of the Blacks. Darkest pansy known, almost black.....	10c.	2606. Psyche. Exquisite velvety violet blotches, margined with white. Frilled petals.....	15c.
2592. Fire King. Upper petals bright reddish brown, on lower ones a dark blotch with yellow margin.....	10c.	2608. Snow Queen. Large satiny white, light yellow center.....	10c.
2593. Freya. Deep purple, edged with silver.....	10c.	2609. Striped. Mahogany with white stripes.....	10c.
		2610. Victoria. Claret red, nearly a blood red.....	10c.
		2612. White with Eye. Large blossom with purple eye.....	10c.

Pansies in Mixtures

2615. Northrup, King & Co.'s Sterling Mixture.

(Sold only in sealed packages.) A mixture of Pansies, unrivaled for diversity of coloring and marking. This mixture is made up from over 100 of the finest named varieties grown by Pansy specialists of the Old and New World. In making up this mixture, expense is not regarded. Our aim is to possess the finest mixture of Pansies obtainable. We have never seen its equal. The diversity of coloring and marking is almost beyond belief. We will cheerfully return money paid for this mixture to anyone who says it is not the finest they ever saw. Pkt., containing 100 seeds, 15c; 600 seeds, 40c; 1,000 seeds, 60c.

2617. Northrup, King & Co.'s Giant Fancy.

(Sold only in sealed packages.) While all the Pansies in our Sterling Mixture are large, we do not include in its make-up many of the giant sorts, for, as a rule, many of our customers prefer to buy them separately. Great improvement has taken place within the last two or three years, however, in the character of the largest Pansies. Our Giant Fancy is the finest mixture of the large varieties. For this is used only the seed from the very choicest blossoms. It includes many of the newest productions of famous growers. Pkt., 10c; 100 seeds, 15c; 600 seeds, 35c.

2618. Northrup, King & Co.'s Bedding Mixed.

Composed of many standard sorts; admirably suited for beds or borders, strong growing plants, very free blooming. Pkt., 5c; 1/4 oz., 25c.

2619. Bugnot's Superb Blotched. Extra large flowers, charming brown-red and bronze shades. Pkt., 15c.

2620. Cassier's Three and Five Blotched Giants. Mostly delicate light shades with dark blotches. Pkt., 15c.

2621. Cassier's Five Blotched Giants. Magnificent mixture. Pkt., 15c.

2622. Large Stained Parisian. White or yellow shades with five striking blotches, very fragrant. Pkt., 15c.

2623. Masterpiece. A remarkable type, the border of each petal being much curled or ruffled, so the flower appears to be double. Pkt., 15c.

2624. Orchid Flowered Mixture. A new race showing beautiful tints of cream, pale mauve, blush, rose, primrose, with brown or golden yellow blotches which diffuse into rays or veins near the edge. The upper petals are plaited, resembling orchids. Pkt., 15c.

2625. Odier's Five Blotched. Seed gathered only from especially selected show plants. Extra large yellow and white flowers. Pkt., 15c.

Pansy Culture.

For spring plants the seed may be sown broadcast from July to September. Cover the seed very lightly with fine soil and press in with a board; then mulch the seed bed with long, loose, strawy manure, to a depth of 3 or 4 inches. The seed will be up in about 10 to 15 days; then remove the straw a little at a time. Transplant the seedlings to beds or frames in September or October and after a sharp frost, late in November or early December, provide a light or loose mulch of hay, straw or litter. The seed may also be sown indoors in January or February; or in spring in the open ground, in a shady, cool spot where the plant can be protected from the strong mid-day sun. The soil should be very rich and liberal applications of bone meal should be given from time to time.

A Customer for Fifteen Years.

I have used your seed for fifteen years and have found them good, especially your Pansy seeds. Our Pansy bed is lovely.

(MRS.) J. C. WRIGHT, Plato, Iowa.

Prettiest I Ever Saw.

The Pansies I bought of you last year were the prettiest I ever saw. I picked a large bouquet of Pansies on Thanksgiving Day.

MATHILDA KNUPFF, Henderson.

For Pansy plants see page 103.

All flower and vegetable seeds are sent prepaid except where otherwise noted.



Types of Northrup, King & Co.'s Sterling Pansy Mixture.



Violas or Tufted Pansies

Violas or Tufted Pansies

Violas are not yet fully appreciated, however nobody needs to see them more than once to realize how much they add to a garden. A border of these plants at Como Park, St. Paul, delighted thousands of visitors.

They are a remarkably free blooming, hardy annual, especially adapted to shady places. The flowers are not so large as the other varieties of Pansies offered on page 67, but they blossom much more freely. Where mere color effect is wanted they are superior to Pansies. Used in masses or as border plants they are fine for edging walks or beds of taller blossoms.

Seeds sown in March or early April produce flowering plants in June, which are a mass of bloom from then until frost.

2630. **Finest Mixed Colors.** ¼ oz., 50c; pkt., 10c.
 2631. **Blue Perfection.** Deep purplish blue. Pkt., 10c.
 2632. **White Perfection.** Pure white. Pkt., 10c.
 2633. **Mauve Queen.** Lilac-blue. Pkt., 10c.
 2634. **Firmament.** Sky blue. Pkt., 10c.
 2635. **Thuringia.** Charming variety. Dark violet blue, white eye. Pkt., 25c.

Viola odorata. Sweet Scented Violet.

The deliciously fragrant, old-fashioned bouquet flower. It was popular in our Grandmothers' day and is still a favorite everywhere; a splendid hardy perennial. Violets are easily grown from seed, doing best in a cool, moist, partially shaded situation. The seeds being hard shelled often take several weeks to come up. Any of the following, 10c per packet.

2626. **Blue.** 2628. **White.** 2629. **Mixed, blue and white.**



Northrup, King & Co.'s Extra Large Flowering Petunia.

PETUNIA

The Petunia is peerless among annuals for effective summer bedding or window boxes. It is of easy culture, early to blossom and continues all the summer until frost. No other flower produces a greater diversity of color, or retains its freshness for so long a period. The doubles may be perpetuated, by cuttings in late summer, for winter house plants. Provide good soil and a sunny location.



2555. Northrup, King & Co.'s Extra Large Flowering Petunias.

(Sold only in sealed packages.) Mixed. This mixture embodies all of the latest varieties, and will prove an agreeable surprise even to those who expect much. All odd and notable kinds, black, crimson, white with yellow throats, marbled, veined, striped, variegated, etc. Pkt., 15c.

2561. **Double Fringed, Pink.** Large, exceedingly double and fringed flowers of bright pink. Pkt., 25c.
 A very desirable variety.

2562. **Fine Mixed.** Excellent for bedding; many splendid colors. Oz., 25c; pkt., 10c.

2565. **Striped and Blotched.** An excellent strain of the small-flowering type. Fine for massing. All colors. ¼ oz., 25c; pkt., 10c.

2570. **Giants of California.** The "Giants of California" bear gigantic flowers often five or more inches in diameter, of an astonishing variety of colors. They embrace every conceivable shade of crimson, pink, lavender, yellow, black, pure white, etc. One of the chief points of excellence is the deep throat and diversity of veining in the throat. Many of the flowers have a clear yellow throat, while others have a pure velvety black one, so deep that it seems to show no veining; many are deeply lined and netted on a white, pink or lavender ground. Many flowers are beautifully ruffled and frilled. Our strain is unexcelled, being saved especially for our critical trade by a leading Petunia specialist. Pkt., 25c.

2572. **Rosy Morn.** Of compact growth covered completely with beautiful flowers one and one-half inches in diameter. The throat is silvery white, while the edge is heavily flushed with soft rosy pink. Very desirable for beds or borders. Pkt., 10c.

2573. **Trailing Petunia.** A small, but very profuse-flowering Petunia, producing 2½ to 3 foot branches thickly set with fragrant flowers, 1 inch across. These are a fine shade of carmine with reddish violet throat. Especially beautiful in window boxes or hanging baskets. Pkt., 25c.

2574. **Dwarf Inimitable.** "Star Petunia," compact-growing variety; flowers are cherry red with white center. Very effective in masses. Pkt., 10c;

2575. **Bedding Petunias.** A superb strain of elegant, large flowers remarkable for their brilliancy and variety of color. Splendid for bedding. Pkt., 10c.

Culture. Sow in May when the ground is warm, in the bed or border where they are to flower. The soil should be well pulverized and the seeds covered to a depth of 4 times their size. Firm with a board, and thin out so that the plants will not become crowded. For early flowering sow indoors in a shallow box, or in a hot-bed, and transfer to open ground when the weather becomes suitable.

The weaker Petunia seedlings should be carefully saved as they frequently produce the finest double flowers. For Petunia plants see page 103.



Trailing Petunia.

2635. Phacelia Campanularia. One of the earliest annuals to blossom; height nine inches; flowers bell-shaped and of a rich deep blue. The showiest annual we have. Pkt., 5c.

Culture for Phacelia Campanularia. Sow in the open ground when danger from frost is past. Cover the seeds to a depth of four times their size and press the surface firmly with a board. Water with fine spray. Thin out so that the plants will not become crowded. For early flowering sow in hot-bed or shallow boxes in the house in March; transferring to open ground in May and June.

Phlox Drummondii. Of all summer-flowering annuals the varieties of Phlox Drummondii are unquestionably some of the most brilliant and satisfactory. Seed may be sown in the open ground any time after danger of frost is past, and in a few weeks the beds or borders are aglow with their brilliant coloring and remain so until cut down by frost. For early flowering they should be started indoors or in a hotbed. For Perennial Phlox Roots see page 86.

2640. Mixed Colors. Oz., 50c; pkt., 5c.

Grandiflora Varieties. Large Flowering. The following six colors are considered the brightest, best and most distinct for bedding;

2642. Pure White. Pkt., 10c

2643. Shell Pink " 10c

2644. Deep Rose " 10c

2645. Crimson Beauty " 10c

2646. Royal Purple " 10c

2647. Blood Red " 10c

2648. Grandiflora, Choicest Mixed. Oz., 75c; pkt., 10c

Phlox Manual. By C. S. Harrison. Price, 25c, post-paid.



Culture for Phlox. Sow out of doors, when danger from frost is over, in the bed or border where they are to flower. The soil should be well pulverized and the seed covered to a depth of about 4 times their size. Press down firmly with a board, and thin out so that the plants will not become crowded. For early flowering they should be sown indoors in a shallow box, or in a hot-bed, and transferred to the open ground when the weather becomes suitable.

2650. Large Flowering Dwarf Varieties. A type combining the size of the individual flower and the head of the finest Grandifloras with the dwarf, compact growth of the dwarf sorts; altogether a perfect combination. Finest mixed colors. ¼ oz., 50c; pkt., 10c.

2655. Star Phlox. (Star of Quedlinburg.) Of dwarf habit with very pretty star-shaped flowers. A novel and beautiful variety. Mixed colors. Pkt., 10c.

2665. Physalis Franchetti. Japanese Winter Cherry. Fruit large, deep red in color, edible, and enclosed in balloon-shaped husks of brilliant orange red. Hardy annual; height two feet. An ornamental variety of the Ground Cherry or Strawberry Tomato. Pkt., 10c.

Culture for Physalis Franchetti. Should not be sown in the open ground before latter part of May. The best plan is to start the seeds indoors in a shallow box or in a hot-bed, in a temperature of about 65 degrees. Cover the seeds to a depth of four times their size and press the surface firm with a board. Water with a fine spray. Transplant the seedlings after the second leaves form and remove to the garden when the weather is warm and settled.

Portulaca. Will grow and bloom abundantly all summer in a dry, hot location, where most other plants would soon die. The flowers are of the richest colors and make a beautiful border.

2668. Parana. This new giant-flowered type from South America produces immense, single blossoms often 3 inches across, bright ruby red in color. They are of very vigorous growth and flower profusely. Pkt., 10c.

2670. Single. Mixed Colors. Pkt., 5c.

2675. Double. Mixed Colors. Pkt., 10c.

Culture for Portulaca. Sow in the open ground when danger from frost is past. Cover the seeds to a depth of four times their size and press the surface firmly with a board. Water with fine spray. Thin out so that the plants will not become crowded. For early flowering sow in hot-bed or shallow boxes in the house in March; transferring to the open ground in May and June.



POPPIES

In both color and form, Shirley Poppies are the daintiest, most exquisite blossoms imaginable. Poised on their long stems like graceful birds they appear to be hovering but a moment before darting away. Their silken gossamer petals vary in shade from scarlet and maroon to pale rose and white.

The blossoming period lasts but a few weeks, which necessitates repeated sowings at intervals for constant bloom. They should be sown as early in the spring as possible, where the plants are to remain, as they do not bear transplanting. When planted with Bachelor's Buttons they make a charming combination bed. As cut flowers they are short lived but if their stems be dipped in boiling water right after gathering, they will last much longer.



Single Annual Poppies.

2680. Northrup, King & Co.'s Sterling Single Mixture. (Sold only in sealed packages.) Embraces all the leading best single varieties. As is always the case with our Sterling Mixture, it has been our aim to include in this mixture every good variety.

Oz., 50c; ¼ oz., 15c; pkt., 10c.

2685. Poppy, Shirley. The flowers are large, exceedingly graceful and elegant; the colors are pure, soft and varied and range from blush-white, rose, delicate pink and carmine, through innumerable tints, to bright sparkling crimson. Oz., 50c; pkt., 10c.

2687. Danebrog, or Danish Cross. Very showy variety, producing large single flowers of brilliant scarlet, with a silvery-white spot on each petal, thus forming a white cross. Oz., 20c; pkt., 5c.

2690. Umbrosum. Richest vermilion, with a deep, shining black spot on each petal. Oz., 25c; pkt., 5c.

2692. English Scarlet. The common field Poppy of Great Britain; dazzling scarlet. Oz., 25c; pkt., 5c.

2694. Flag of Truce. Satiny-white flowers 3 to 4 inches across. Oz., 25c; pkt., 5c.

2696. Tulip Poppy. A magnificent species from Armenia. The plants grow about 14 inches high and produce from 50 to 60 large tulip-like flowers of dazzling scarlet. Oz., 60c; pkt., 10c.

2698. Fire Dragon. Very showy and free-flowering, producing flowers of brilliant deep scarlet with black spots, margined white. 2 to 2½ feet. Oz., 50c; pkt., 10c.

2700. Single Mixed. Annual sorts. Oz., 20c; pkt., 5c.

Double Annual Poppies.

Beautiful fringed blossoms on strong, vigorous stems, Double Poppies make splendid cut-flowers. Striped, tinted and shaded, they resemble big lacey rosettes. The flowering period of Double Poppies is very much



longer than that of the Single Shirleys and the plants need more space to develop to perfection.

Culture. Sow out of doors when danger from frost is over, in the bed or border where they are to flower. For constant bloom sow at intervals of two weeks. The seed bed should be especially well prepared—raked and pulverized until very fine and then well firmed. Mix the seed with an equal quantity of fine soil, to facilitate even sowing. Sow on the surface and press down firmly with a board. When the seedlings develop their second leaves thin out to prevent crowding. They should stand at least 4 inches apart. Use tobacco spray for aphids, see page 149.



2705. Northrup, King & Co.'s Sterling Double Mixture. (Sold only in sealed packages.) Includes all of the best double varieties of large-flowering Poppies of all colors; also many varied tints and combinations of color. Many of the blossoms are 6 to 7 inches in diameter and as double as Paeonies, 30 to 36 inches high. They are fine for cut-flowers or garden display. Oz., 50c; ¼ oz., 15c; pkt., 10c.

2707. American Flag. Beautiful variety; flowers very large and double, snow white, bordered with scarlet. Oz., 25c; pkt., 5c.

2710. Fairy Blush. Very double flowers of pure white, elegantly fringed and tipped with rose. Oz., 25c; pkt., 5c.

2712. White Swan. Immense double flowers; beautifully fringed and of purest white. Oz., 25c; pkt., 5c.

2714. "Mikado" (The Striped Japanese Poppy.) This beautiful Poppy is very distinct in character and color. The flowers are brilliant scarlet and white with elegantly curved petals, like a Japanese Chrysanthemum. Oz., 25c; pkt., 5c.

2716. The Golden Poppy. A new and novel variety, with golden-yellow foliage and double flowers in various red shades; 1 ft. Pkt., 15c.

2718. Carnation Flowered. Splendid, double, fringed flowers. Mixed colors. Oz., 20c; pkt., 5c.

2720. Paeony Flowered. Large, showy, double, globular flowers, resembling a double Paeony, Mixed colors. Oz., 20c; pkt., 5c.

2722. Scarlet Featherball. Very beautiful with fringed-edged petals like big balls of slashed tissue paper or feathers. Double, brilliant red flowers. Pkt., 10c.

Perennial Poppies. See page 80.

California Poppy or Eschscholtzia. See page 62.

All flower seeds are sent prepaid.

Ricinus. Castor Oil Bean. Ornamental plants of stately growth and picturesque foliage, with brilliant colored fruit, producing a sub-tropical effect; fine for lawns, massing or center plants for beds.

Culture. Sow out of doors, when danger from frost is over, in the bed or border where they are to flower. The soil should be well pulverized and the seed covered to a depth of about four times their size. Press down firmly with a board, and thin out so that the plants will not become crowded. For early flowering they should be sown indoors in a shallow box, or in a hot-bed, and transferred to the open ground when the weather becomes suitable.

2725. *Borboniensis*. Very large and beautiful, green foliage; 15 ft. Oz., 15c; pkt., 5c.

2726. *Gibsoni*. Dwarf branching habit, deep red foliage; 5 feet. Oz., 15c; pkt., 5c.

2728. *Cambodgensis*. The main stem and leaf stalks are shining ebony, leaves large, regularly divided and richly colored; 5 feet. Oz., 20c; pkt., 5c.

2729. *Zanzibariensis*. Have light and dark green leaves and some of coppery bronze changing to dark green with reddish ribs. Oz., 15c; pkt., 5c.

2730. *Mixed*. All sorts, best varieties. Oz., 15c; pkt., 5c.

Salpiglossis. Painted Tongue. Very beautiful hardy annual plants, flowering should be provided, with plenty of space for plants to develop.

Culture. Sow out of doors, when danger from frost is over, in the bed or border where they are to flower. The soil should be well pulverized and the seed covered to a depth of about four times their size. Press down firmly with a board, and thin out so that the plants will not become crowded. For early flowering they should be sown indoors in a shallow box, or in a hot-bed, and transferred to the open ground when the weather becomes suitable.

2732. *Large Flowering Mixed*. The exquisite beauty of the flowers, with their rare combination of color, is a revelation to all who may see them for the first time. A splendid variety of color, flowers of large size. Pkt., 5c.

2735. *Emperor*. This new variety forms only one leading stem, and bears on its summit a veritable bouquet of the most beautiful flowers, each one richly veined with gold, and much larger than the finest of the "Grandiflora" type. Pkt., 10c.

Salvia. Scarlet Sage. One of the handsomest flowering plants we have for garden decoration. For early flowering seed should be sown indoors in a shallow box, or in a hot-bed, and transferred to the open ground when the weather becomes suitable.

2740. *Salvia Splendens*. Excellent for filling large beds or borders in the garden; continuously in bloom from early August until the first killing frost. Beautiful scarlet; large flowering. 2½ ft. high. ¼ oz., 50c; pkt., 5c.

2745. *Clara Bedman*. (Bonfire.) The plants form handsome, globular bushes about two feet in diameter. The spikes grow upright and stand clear above the foliage, completely enveloping the plant, and are of most brilliant, dazzling scarlet. Pkt., 10c.

2750. **Scabiosa. Mourn=**
ing Bride. One of our handsomest summer border plants, producing in great profusion very double flowers in a variety of shades and colors. Excellent subjects for cut flowers, lasting nearly a week after being cut. Sow the seeds in May and thin out the young plants to 6 inches apart. Mixed, pkt., 5c.

Culture for Scabiosa. Sow out of doors, when danger from frost is over, in the bed or border where they are to flower. The soil should be well pulverized and the seed covered to a depth of about four times their size. Press down firmly with a board, and thin out so that the plants will not become crowded. For early flowering they should be sown indoors in a shallow box, or in a hot-bed, and transferred to the open ground when the weather becomes suitable.

The Gold Mine in the Front Yard. By C. S. Harrison. How to beautify the home by judicious use of flowers. Price, \$1.00, postpaid.

Ornamental Foliage Plants Grown from Seed.

Amaranthus	Kochia
Begonia	Marvel of Peru
Canna	Musa
Cineraria	Pyrethrum
Colerus	Ricinus



Salvia Splendens.

Fragrant Flowers from Seed.

Varieties marked H. P. are Hardy Perennials.

Abronia	Lavender, H. P.	Scabiosa
Alyssum	Matthiola	Stocks
Carnations	Mignonette	Sweet Peas
Cyclamen	Mimulus	Sweet Sultan
Dianthus, Hardy	Nicotiana	Sweet William, H. P.
Geranium	Petunia	Verbena, Lemon
Heliotrope	Pinks, H. P.	Wallflower

Pæonies and Iris.

No garden is too small for these old favorites, no garden complete where they are lacking. Annuals and bedding plants come and go but the perennials become our constant friends. Pæonies and Iris are fine for cutting and make effective displays in home or church. They are the most popular of all hardy plants and justly so, since no other plants combine so many fine qualities with so few objectionable features. They are easy to grow, hardy everywhere, and almost free from disease and insect pests. Ideal for the northwest climate. We recommend April planting for both Pæonies and Iris.

Pæony Collections.

Choice Collection. 25 splendid named Pæonies, by express at purchaser's expense, \$8.00. See page 84 for complete list.

Surprise Collection. 12 fine Pæonies, our selection, by express at purchaser's expense, \$3.00.

Iris Collections.

German Iris Collection. 12 extra fine named Iris for \$1.50 or 6 for 75c, by express at purchaser's expense. See page 87 for complete list.

Japanese Iris Collection. 12 splendid varieties of Japanese Iris, \$3.50, by express at purchaser's expense. See page 87 for complete list.

Japanese Lily Collection.

Permanent and very hardy. These four varieties are the finest of all Lilies. Plant in rich, well drained soil, placing sand around the bulbs. See page 105 for complete list of Lilies.

Auratum (Gold Banded Lily), **Album** (Pure White), **Rubrum** (Deep Pink—Dark Spots), **Melpomene** (Frosted White—Spotted Crimson), one of each variety, \$1.50, postpaid. Three of each, 12 bulbs, \$3.75, postpaid. Any of above, doz., \$3.50, by express at purchaser's expense.



SCABIOSA

Stocks. Gilliflower. This stock is one of the most popular annuals, either for bedding or pot culture; for brilliancy and diversity of color, fragrance, profusion and duration of bloom it is unsurpassed. Start the seeds in February and March, and as soon as the plants have their second pair of leaves, prick out into shallow boxes and in about four weeks the plants will be ready to pot; from which they should be transferred to the open ground in May or June.

Large Flowering Ten-Weeks Stock. This is the leading class for bedding out or summer blooming.

2755. Blood Red	Pkt., 10c
2760. Bright Pink	Pkt., 10c
2765. Purple	Pkt., 10c
2770. Pure White	Pkt., 10c
2775. Light Blue	Pkt., 10c
2780. Canary Yellow	Pkt., 10c
2785. Mixed Colors	Pkt., 5c
2790. Collection, 6 separate colors, one packet of each for	50c

2795. Thunbergia. Black

Eyed Susan. Beautiful rapid-growing annual climber, preferring a warm, sunny situation; used extensively in hanging baskets, vases, low fences, etc., very pretty flowers in buff, white, orange, etc., with dark eyes; mixed colors; 4 feet. Oz., 50c; pkt., 5c.

Culture for Thunbergia. Sow in the open ground when danger from frost is past. Cover the seeds to a depth of four times their size and press the surface firmly with a board. Water with fine spray. Thin out so that the plants will not become crowded. For early flowering sow in hot-bed or shallow boxes in the house in March; transferring to the open ground in May and June.

Drooping Plants for Vases, Hanging Baskets, etc.

Alyssum	Nasturtium, Tall
Asparagus Sprengeri	Oxalis
Calendula	Petunia
Maurandia	Vinca



TEN WEEKS STOCK



SALPIGLOSSIS

Sweet Pea Novelties

Northrup, King & Co.'s Selection of Spencer Sweet Peas for 1915.

The following nine varieties represent the most beautiful of all Sweet Peas to date, the greatest advance in Sweet Peas in a decade. We urge all Sweet Pea lovers to plant our Supreme Collection this Spring.

Margaret Atlee
The Spencer Supreme



We are satisfied that the newer Spencer Varieties of Sweet Peas are not yet fully appreciated in the United States. The supply of seed of the sorts which we offer below is still very limited but when the seed stock increases and they become better known they will be far more popular, as they show the greatest advance in Sweet Peas in a decade.

Both in colors and size they represent the latest triumphs of the plant breeder's skill. In these will be found the richest shades from apricot pink to silvery blue, ivory white to royal purple.

We trust all our customers will try a few of these beautiful selections this year, that they may enjoy in their own gardens, the Sweet Peas which at home and abroad have received the highest awards at all Sweet Pea exhibitions.

Margaret Atlee

The Spencer Supreme, Salmon Pink

The largest and finest Sweet Pea yet introduced. It is a rosy salmon-pink on a creamy buff ground; a rich soft color, and extremely attractive, both as individual flowers and in the bunch. The standard is large, wavy and frequently double. The wings are also large, wavy, well set. There are usually four blossoms to a stem; well poised and graceful. Under ordinary cultural conditions they are beautifully delicate and refined. With special culture for exhibition flowers they produce large thick petals, stems up to 20 inches long and enormous leaves. Pkt. of 40 seeds, 25c, postpaid.

Jessie Cuthbertson Spencer

Very Striking, Unusual Markings

This has a primrose ground, well marked with stripes, blotches and flakes of crimson pink. A bunch produces a very striking effect of golden rose. Whoever is fond of unusual markings in Sweet Peas will be delighted with Jessie Cuthbertson Spencer. Pkt. of 25 seeds, 15c, postpaid.

New Miriam Beaver

Apricot Pink on Primrose Ground

A charming combination of bright apricot-pink on a primrose ground a little deeper at the margins and showing pure primrose at the base of the petals, of perfect Spencer form, four blossoms on the stem all gracefully set. In appearance this resembles the original Miriam Beaver but in this newer variety the lovely colors are well fixed. Pkt. of 12 seeds, 25c.

New Margaret Madison

Azure Blue, Tinted Mauve

A large perfect Spencer, of delicate azure blue, slightly tinted with mauve. The mauve tint shows only in the newly opened blossoms and the fully expanded flowers are clear light lavender. As the season progresses the blossoms sometimes show a slight blotching of deeper blue which is very attractive. Pkt. of 40 seeds, 25c, postpaid.

Royal Purple

A New Sweet Pea Shade

Royal Purple is a new shade in Sweet Peas, a rich purple, almost a true royal purple. This shade does not exist in grandifloras. This is the first time this color has been offered either here or abroad. Pkt. of 12 seeds, 25c, postpaid.

Helen Pierce Spencer

Bright Blue Overlaid on Ivory

A gorgeous bright blue, marbled and overlaid on ivory white. The marbling is brightest early in the season and in the younger blossoms, but is softer and daintier when it becomes less pronounced later in the season. Pkt. of 12 seeds, 25c, postpaid.

Wedgewood

Bright Silvery Blue

A bright silvery blue self color, of modern Spencer size, finely formed and usually bearing four blossoms to the stem. Our strain comes wonderfully true to type and is absolutely pure. Pkt. of 25 seeds, 15c, postpaid.

Veiled Bride

Ivory Ground, Marbled Pink

An ivory ground, sprinkled or marbled with light pink. This marbling is quite uniform though perhaps a trifle deeper at the margins. In short it may be described as a pink Helen Pierce Spencer. In form it is a large, exquisitely shaped Spencer. The seed supply of this variety is extremely limited. Pkt. of 12 seeds, 25c, postpaid.

King White

The Largest White Spencer

The grandest of all white Sweet Peas, and of the most up-to-date Spencer form. It is much the largest white Spencer—the buds are of exceptional size before opening, even the seed pods are unusually large. The stems are long and stout, and bear practically always four blossoms. King White created a sensation last season wherever shown. Pkt. of 40 seeds, 25c.

Supreme Collection of Spencer Sweet Peas.

This includes one packet of each of the above nine varieties of Spencer Sweet Peas. All lovers of Sweet Peas should include the Collection in their orders this year, they will furnish a delightful surprise. The 9 pkts., \$2.00, postpaid.

Northrup, King & Co.'s
Dollar Collection of
Sweet Peas.

12 Varieties Named Spencers
All different, selected from
page 73, \$1.00, postpaid.

Northrup, King & Co.'s
Giant Orchid Flowering
or Spencer Sweet Peas.

One packet of each of the
varieties on page 73, 41 pkts.
in all, \$3.50, postpaid; 20
pkts., customer's selection,
\$1.75, postpaid.

SWEET PEAS

Northrup, King & Co.'s Giant Orchid Flowering or Spencer

The rapid progress in the development of Sweet Peas to their present state of size and beauty has practically all been accomplished within the last ten or dozen years. For a century and a half previous it was the marvel among botanists that more varieties of Sweet Peas had not been developed and that greater size, length of stem and variety of colors had not been obtained. It was discovered eventually that artificial cross fertilization must be undertaken in order to produce the desired results.

New colors and forms appeared in rapid succession until a new type was found in the gardens of Earl Spencer, Northamptonshire, England. This newcomer was extremely beautiful, wonderfully formed and the largest Sweet Pea ever grown and was known as Countess Spencer. From this variety has sprung the modern race of Giant Orchid Flowering or Spencer Sweet Peas. We believe that this form is destined to supersede the older types, as soon as colors have become fixed and the seed can be produced in sufficient quantity to supply the demand. Because of the fact that the majority of the flowers of true Spencer fall off as they fade, that is before the seed pod is formed, the seeding propensity of this type is greatly reduced and as a consequence seed is more expensive because of the added cost of production. This habit has its advantages, however, as the flowering period is greatly lengthened and the abundance of bloom is largely increased. The strength of the plant is directed towards production of blossoms rather than seed.

The characteristics of the Spencer Sweet Peas grown under favorable conditions, are strong, healthy growth, plants attaining height of from six to nine feet, requiring for full development, a space at least six inches apart. The blossoms are of immense size, measuring 2 to 2½ inches across. They are beautifully formed with huge standards, open and upright and immense wings gracefully poised. Both standards and wings are delicately waved; the undulations reflecting lights and casting shadows in the depths, thus showing varied harmony of tones which greatly enhances the coloring. Three and often four of these handsome blossoms are borne on long, strong stems, rendering them available as cut flowers for vases, bouquets and other decorations.

Named Varieties=Spencers.

2835. Apple Blossom Spencer. The ground tint is primrose, standard rose showing veins of deeper rose, wings light carmine, the whole color overspread on primrose. Pkt., 10c; oz., 35c; ¼ lb., \$1.00.

2837. America Spencer. Bright crimson scarlet, striped on white. Pkt., 10c; oz., 35c; ¼ lb., \$1.00.

2840. Asta Ohn Spencer. This selection is lavender, suffused or tinted with mauve. The best lavender in the Spencer selections. Pkt., 10c; oz., 50c; ¼ lb., \$1.50.

2845. Audrey Crier. A lovely shade of salmon pink, very large, with a majority of four flowers to a spike. Pkt., 10c; oz., 35c; ¼ lb., \$1.00.

2850. Aurora Spencer. The ground color is a cream-white, and this is exquisitely flaked and mottled with rich orange-salmon. Pkt., 10c; oz., 35c; ¼ lb., \$1.00.

2855. Blanche Ferry Spencer. The well known pink and white variety of Spencer type. Pkt., 10c; oz., 35c; ¼ lb., \$1.00.

2858. Captain of the Blues Spencer. Bluish purple, with distinct margins of lilac. Pkt., 10c; oz., 35c; ¼ lb., \$1.00.

2860. Countess Spencer Variety. Bright clear pink showing a little deeper at the edges. Pkt., 10c; oz., 35c; ¼ lb., \$1.00.

2865. Dainty Spencer. White with very light pink edge. Pkt., 10c; oz., 35c.

2868. Evelyn Hemus. Cream, shading to yellow, terra-cotta points; standards full waved. Pkt., 10c; oz., 35c; ¼ lb., \$1.00.

2869. Flora Norton Spencer. Bright blue with tint of purple. Pkt., 10c; oz., 50c; ¼ lb., \$1.50.

2870. Florence Morse Spencer. Delicate blush with pink margin. Perhaps better described as a light pink-edged Countess Spencer. Pkt., 10c; oz., 50c; ¼ lb., \$1.50.

2875. Gaiety Spencer. Light magenta-rose striped on white. Pkt., 10c; oz., 35c; ¼ lb., \$1.00.

2880. George Herbert Spencer. Bright rose carmine. Pkt., 10c; oz., 35c.

2882. Helen Lewis or Orange Spencer. Immense rich crimson-orange; wings orange rose. Pkt., 10c; oz., 35c; ¼ lb., \$1.00.

2883. John Ingman. A new, rich rosy-carmine, veined deeper. Pkt., 10c; oz., 35c; ¼ lb., \$1.00.

2915. Primrose Spencer. Primrose color throughout. Pkt., 10c; oz., 50c.

2920. Prince Edward of York Spencer. Standard scarlet with tint of crimson. Wings crimson. Pkt., 10c; oz., 35c; ¼ lb., \$1.00.

2925. Prince of Wales Spencer. Rich rosy crimson with tint of cherry red. Pkt., 10c; oz., 35c; ¼ lb., \$1.00.

2930. Princess Alice Spencer. Light rosy mauve of Spencer form. Pkt., 10c; oz., 35c; ¼ lb., \$1.00.

2935. Princess Katherine Spencer. A grand, black seeded white of lovely type. Pkt., 10c; oz., 35c.

2940. Princess Victoria. White blush and pink edged Spencer. Pkt., 10c; oz., 35c; ¼ lb., \$1.00.

2945. Queen Alexandra. Magnificent flowers of largest size; rich, bright scarlet. Pkt., 10c; oz., 35c; ¼ lb., \$1.00.

2950. Queen Victoria Spencer. The back-ground is quite a deep primrose flushed with rose. Flowers of good substance. Pkt., 10c; oz., 35c.

2955. Ramona Spencer. Like the well known Ramona, this variety is clear white, with soft delicate lines and flakes of blush-pink. Delicate and beautiful. Pkt., 10c; oz., 35c.

2960. Ruby Spencer. Scarlet Spencer. Pkt., 10c; oz., 35c; ¼ lb., \$1.00.

2965. Senator Spencer. Chocolate and seal brown, striped, flaked and mottled on ivory white. Pkt., 10c; oz., 35c; ¼ lb., \$1.00.

2970. Sutton's Queen. Primrose edged in margin with buff and rose. The standard is wavy and the full expanded wings are large, and somewhat wavy. The newly opened wings are small and spherical and very distinct for this variety. Pkt., 10c; oz., 25c; ¼ lb., 75c.

2975. White Spencer. Flowers absolutely pure white. Stems 12 to 15 inches in length. Pkt., 10c; oz., 35c; ¼ lb., \$1.00.

Spencer Sweet Peas

have long, strong stems

and bear three and

four blossoms on each.

2885. Juanita Spencer. Standard mauve, wings lavender, both striped on white. Pkt., 10c; oz., 35c; ¼ lb., \$1.00.

2890. King Edward VII Spencer. The standard is a deep, rich carmine scarlet of glossy effect. The wings are also carmine scarlet, and on the reverse side are a deep rose carmine. Pkt., 10c; oz., 35c; ¼ lb., \$1.00.

2891. Lovely Spencer. Standard light blush pink with blotch of rose at the base; wings the same, all suffused with soft buff. Pkt., 10c; oz., 50c.

2888. Maud Holmes Spencer. Rich crimson, fine large flower and quite sun-proof. Pkt., 10c; oz., 35c; ¼ lb., \$1.00.

2892. Menie Christie. Both the large fluted standard and wavy wings are of the same color, a lovely ruby-rose with a slightly deeper shade in the standard and a satiny sheen on the petals. Pkt., 10c; oz., 35c; ¼ lb., \$1.00.

2893. Mrs. Chas. Mander or Royal Purple Spencer. A distinct sort; color rosy-lavender. Pkt., 10c; oz., 35c; ¼ lb., \$1.00.

2894. Mrs. Hardcastle Sykes or Pale Pink Spencer. Flowers of purest pale pink. Pkt., 10c; oz., 35c; ¼ lb., \$1.00.

2895. Mrs. Jos. Chamberlain Spencer. Rose striped on white on both standard and wings. Pkt., 10c; oz., 35c; ¼ lb., \$1.00.

2900. Mrs. Routzahn Spencer. Buff or apricot ground flushed and suffused with delicate pink, or a very soft rose, deepening towards the standard and wings, giving somewhat of a picotee edged effect. Pkt., 10c; oz., 50c; ¼ lb., \$1.50.

2910. Mrs. Walter Wright Spencer. Rose purple, self colored, changes slightly to a bluish purple as it fully matures. Pkt., 10c; oz., 35c; ¼ lb., \$1.00.

2912. Othello Spencer. Rich deep maroon. Pkt., 10c; oz., 35c; ¼ lb., \$1.00.

2913. Picotee Spencer. Beautiful white, edged carmine. Pkt., 10c; oz., 35c; ¼ lb., \$1.00.



YELLOW AND PRIMROSE SHADES.

3038. Agnes Johnson. Light pink, buff and cream.
 3039. Henry Eckford. Exceptionally bright and distinct shade; self-colored, soft flaming orange.
 3040. Marchioness of Cholmondeley. Delicate salmon; wings light buff.
 3041. Mrs. Collier. A rich primrose tint; flowers are very large, coming in threes and fours on long stiff stems.
 3042. Queen Victoria. Light primrose.
 3044. Sybil Eckford. The color is an exquisite rich apricot and lemon effect, the standard being a delicate blush-pink shade on lemon ground; wings a delicate lemon.
 3046. Stella Morse. Buff, tinted pink.
 3048. The Hon. Mrs. E. Kenyon. Clear buff-yellow, spreading flowers.

PINK AND ROSE SHADES.

3049. Agnes Eckford. Beautiful soft light pink. Wings wide and expanded, slightly rolled at the outer edges.
 3050. Apple Blossom. Crimson pink, shading lighter; wings white, tinted pink.
 3051. Bolton's Pink. A grand flower, color bright, orange-pink. Flowers, which are borne three to stem, are boldly expanded and of fine substance.
 3052. Countess of Lathom. Delicate pink self.
 3054. Dainty. White with pink edge.
 3056. Hon. F. Bouverie. Deep pink shading to light pink at the edges.
 3058. Janet Scott. Deep pink.
 3060. Jennie Gordon. A large flower. Bright rose with crimson shading.
 3064. Lovely. Pink standard, delicate rose wings.
 3066. Lord Roseberry. Bright cherry-rose, hooded form.
 3068. Mrs. Dugdale. Crimson rose, self colored, on primrose ground.
 3070. Miss Wilmot. Deep orange-pink.
 3072. Modesty. Blush or soft pink; the lightest of all.
 3074. Prima Donna. Lovely pale pink. Very fine.
 3075. Queen of Spain. Peach-blossom pink, with slight apricot tinge. Color effect buff-pink, medium size, hooded form.

RED STANDARD WITH WHITE WINGS.

3076. Earliest of All. Rose and white.
 3078. Extra Early Blanche Ferry. The popular pink and white.

LAVENDER AND LIGHT BLUE SHADES.

3094. Admiration. Flowers large; a very delicate shade of pinkish-lavender.
 3096. Countess of Radnor. Pale mauve or lavender.
 3098. Emily Eckford. Standard reddish-mauve, wings blue.
 3100. Lady Grisel Hamilton. Pale lavender-blue.
 3102. Lottie Eckford. White, suffused with lavender-blue.
 3104. Mrs. Geo. Riggison, Jr. Delicate lavender.

SWEET PEAS

Northrup, King & Co.'s Waved or Unwin Sweet Peas.

This class of Sweet Peas is similar to the famous Spencers, but the blossoms are smaller and frequently of rather heavier texture. They exist in many colors, but we list only the most popular. Both standard and wings are wavy and nicely formed. They seed more freely than Spencers and are for that reason less expensive, but still are higher in price than the Select or Grandiflora type.

3002. Chrissie Unwin. A fine new light scarlet, of splendid form and substance. Pkt., 10c; oz., 25c; ¼ lb., 75c; lb., \$2.50.
 3003. E. J. Castle. A rich carmine rose, with salmon shading in the standard. A bold and wavy flower of striking effect. Pkt., 10c; oz., 25c; ¼ lb., 75c; lb., \$2.50.
 3006. Frank Dolby. A large, fine, light lavender, with bold wavy standard and widely spreading wings, beautifully fluted. Pkt., 10c; oz., 25c; ¼ lb., 75c; lb., \$2.50.
 3007. Gladys Unwin. Lovely light pink. A bold flower, crinkled and waved. Pkt., 10c; oz., 25c; ¼ lb., 75c; lb., \$2.50.
 3015. Mrs. Alfred Watkins. Clear pink, deeper at outer edges. Flowers large and widely spreading, with the wavy or crinkled effect so much desired. Pkt., 10c; oz., 25c; ¼ lb., 75c; lb., \$2.50.
 3019. Nora Unwin. Beautiful pure white, finely waved or fluted. A very effective flower of good substance. Pkt., 10c; oz., 35c; ¼ lb., \$1.00; lb., \$3.50.
 3020. Phyllis Unwin. Beautiful rose color throughout. The long stout stems carry three and four flowers each. Standard crinkled, wavy, with broad wings. Pkt., 10c; oz., 25c; ¼ lb., 75c; lb., \$2.50.

How to Plant. For the Sweet Pea row, prepare a trench 2 feet deep and at least 1½ feet wide. Fill in with a mixture of rich loam and well rotted barnyard or sheep manure; after wetting down, cover with 6 inches of earth. Make a furrow 3 inches deep in this and drop the seed, 4 seeds every 4 inches and cover 2 inches deep.

White Seeded Sweet Peas should not be sown until the ground has thoroughly thawed. Sweet Peas require a long period of slow growth under cool conditions which are necessary for good root formation. Late sown Sweet Peas, especially when planted after May 15th are seldom worth while. Cover plants with earth from time to time as they appear, until on a level with the ground. When they are 5 inches high, erect a poultry netting trellis for them to climb. With proper care they will grow 6 to 10 feet high. For a good stand of plants use a pound of seed for 100 feet of row.

Northrup, King & Co.'s Select or Grandiflora Sweet Peas.

This is the well known type which has been grown for many years. It comprises two forms, "hooded or shell-shaped," and "open". The Grandifloras usually seed freely, are always the most easily grown and will always be the most largely used.

We will furnish the following varieties at the uniform price of 5c a pkt., 15c an oz., 50c for a ¼ lb., \$1.50 a lb., postpaid. By express or freight at purchaser's expense, \$1.40 per lb.

WHITE.

3030. Blanche Burpee. A superb pure white.
 3032. Dorothy Eckford. The finest white; very large.
 3033. Emily Henderson. White; very floriferous.
 3034. Phenomenal. Silvery-white, faintly suffused with soft pink and beautifully edged with rich purple.
 3035. Shasta. A very large, pure white; of excellent substance with the edges of both standards and wings finely fluted.
 3036. White Wonder. Pure white, of largest size, with frequently six to eight flowers on a stem.

SHADES OF RED.

3080. Coccinea. A beautiful cerise.
 3082. Firefly. Deep brilliant scarlet.
 3084. King Edward VII. Bright crimson self color.
 3085. Millie Maslin. Extra large, fine, bold flowers of a rich rosy-crimson self—very much deeper than *Prince of Wales*. Vines vigorous in growth and most profuse in bloom.
 3086. Prince of Wales. Bright rose, self colored.
 3087. Queen Alexandra. The nearest approach to a pure scarlet. A bold expanded flower of finest form.
 3088. Royal Rose. Deep rosy-pink.
 3090. Scarlet Gem. Almost a dazzling scarlet.
 3092. Sunproof Salopian. One of the best.

BLUE AND PURPLE SHADES.

3106. Brilliant Blue. The richest dark navy blue. The standard is very large and lightly hooded.
 3108. Captain of the Blues. Standard light maroon, wings light purple.
 3110. Countess of Cadogan. Reddish-mauve standard, wings violet-blue.
 3112. Duke of Westminster. Almost a clear purple.
 3114. Flora Norton. A beautiful bright blue. The most pronounced in this shade.
 3115. Helen Pierce. Bright blue, mottled on pure white, resembling very much a blue mottled Gloxinia.
 3116. Horace Wright. A very large bold flower of rich dark coloring. Standard violet-maroon, wings violet; large hooded form.
 3117. Mrs. Walter Wright. Beautiful deep mauve.
 3118. Navy Blue. Deep violet-blue.
 3119. Prince Olaf. The bold effective flowers are striped and mottled bright blue on white ground; of good size with erect expanded standard; the flowers are borne frequently four to the stem. It is a very profuse bloomer.
 3120. Romolo Piozzani. A violet-blue self. Standard slightly hooded; flowers of great substance.

PINK AND RED STRIPES.

3122. America. The brightest blood-red striped.
 3124. Aurora. Flaked orange-salmon.
 3126. Golden Rose. Primrose-yellow, striped with rosy-pink.

CLARET AND MAROON SHADES.

3128. Black Knight. Very deep maroon, large size and open form.
 3130. Othello. Dark glossy maroon.
 3132. Shahzada. Dark maroon, shaded purple.

Book on Peas and Pea Culture. By Glenn C. Sevey. A very complete book on this subject, including sweet peas, garden peas and field peas. Price, 50c, (postpaid, 55c).

SWEET PEAS.

3150. Northrup, King & Co.'s Sterling



Mixture. Sold only in sealed packages. The finest and most desirable mixture possible to put together. The acme of richness and beauty, matchless in combinations of colors and giant sweet scented flowers. Every color of the rainbow and an almost unlimited variety of shades, tones and combinations of colors, striped, splashed, mottled and margined. Nothing seems to have been forgotten. It is made up regardless of expense, the aim being to secure in this mixture, the largest flowering sorts and the widest possible range of colors. Without doubt this mixture reaches perfection. It is our aim to constantly improve, when possible, by adding new varieties as they are introduced. We include the magnificent Spencers, the superb Unwins and the always popular Grandifloras; a mixture, in fact, of which any one may be proud. Pkt., 5c; oz., 20c; ¼ lb., 60c; lb., \$2.00, postpaid.

3155. Eckford's Large Flowering Mixed. This elegant mixture embraces the introductions, including the recent novelties of Mr. Eckford, the Sweet Pea specialist of England, who has accomplished more than any other individual in bringing the Sweet Pea to its present state of beauty, size and perfection. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00, postpaid.

3160. Choice Mixed. This is a most excellent mixture, embracing all the standard varieties and many colors. Oz., 8c; ¼ lb., 25c; lb., 75c; postpaid.

Cupid Dwarf or Bedding Sweet Peas. Sown as a border they form a line of emerald green foliage a little over a foot wide and from 5 to 6 inches high, and from June until late summer are literally a sheet of bloom, and from the fact that they cover the ground so closely they are not so likely to suffer from drought as the tall sorts.

3165. Mixed Colors. Pkt., 5c; oz., 15c; ¼ lb., 50c; lb., \$1.50.

3170. Northrup, King & Co.'s Giant Orchid Flowering or Spencer Mixture.

Spencer varieties of Sweet Peas have come into general favor so rapidly that the demand has been large for all Spencer sorts in mixture. We have included in this combination nearly all of the Spencers, making it a rare and lasting pleasure to the grower. The vines are strong, healthy and vigorous in growth and produce in wonderful profusion, long and strong stemmed flowers of great beauty, size, perfect form and coloring. Those preferring to grow all sorts together, rather than separate colors, will find this unsurpassed. Pkt., 10c; oz., 25c; ¼ lb., 75c; lb., \$2.50, postpaid.

Essentials for Success with Sweet Peas.

Plant early in well prepared soil—see page 74 for directions. Water ground thoroughly when required, never just sprinkle. Do not let seed pods develop.

SWEET PEA COLLECTIONS.

We are frequently asked by our friends and customers to select for them the best varieties. To meet the many requests of the kind, we have prepared the following choice assortments, which we are offering at a reduction to induce our customers to include at least one collection in their order this year.

3180. Northrup, King & Co.'s Twelve Bouquet Gems.

50c, postpaid. This beautiful collection contains one packet of each of the 12 choicest, large flowered, fragrant sorts; borne on long stems, embracing the cream of our Grandiflora list. We also offer one ounce of each of the twelve Bouquet Gems for \$1.25, postpaid.

3190. Spencer Sextette Collection. 1 packet each of six Spencer varieties in separate colors for 60c, postpaid.

White Spencer. King Edward VII Spencer, red. Asta Ohn Spencer, lavender. Helen Lewis or Orange Spencer. Countess Spencer, pink. Othello Spencer, rich deep maroon.

3195. Grandiflora Sextette Collection.

1 packet each of six Grandiflora varieties in separate colors for 25c, postpaid. Dorothy Eckford, white. King Edward VII, red. Lady Grisell Hamilton, lavender. Miss Wilmot, deep orange pink. Prima Donna, pink. Black Knight, maroon.

Enemies of the Sweet Pea.

Birds, cut worms and slugs are most destructive to Sweet Peas in the garden and they will frequently eat up an entire row. For slugs and cut worms a sprinkling of air-slacked lime around the young shoots will protect them more or less and sometimes the worms can be attracted and killed by putting a bunch of green grass dipped in Paris Green near the Sweet Pea row. A sprinkling of Paris Green on the plants will sometimes keep birds away. A strip of wire netting covering the row until the plants are 6 inches high will also be effective.

For plant lice or aphids use Sulpho-Tobacco Soap, Nico-Fume Liquid or some other tobacco extract spray.

See page 149 for insecticides.



A Fine, Well Grown Row of Sweet Peas.

VERBENA

Culture. Should not be sown in the open ground before latter part of May. The best plan is to start the seeds indoors in a shallow box or in a hot bed, in a temperature of about 65 degrees. Cover the seeds to a depth four times their size and press the surface firm with a board. Water with a fine spray. Transplant the seedlings after the second leaves form and remove to the garden when the weather is warm and settled.



Northrup, King & Co.'s Mammoth Verbena.

(Sold only in sealed packages.) The largest Verbena known, a single flower

often being as large as a twenty-five cent piece. The beauty of this plant is well known and scarcely needs comment. For garden beds or effective massing the Verbena is unequalled. They bloom profusely the first year from seed, the flowers lasting until late in the autumn. Thrives best in a sweet turfy loam, and should be given space to trail over the ground. Verbenas should not be grown in the same place two years in succession. See page 103 for plants.

- | | | |
|--|---|--|
| 2800. Mammoth Aurora Borealis. | Intense carmine-scarlet. | Pkt., 25c. |
| 2802. Mammoth Pink | Pkt., 10c | 2811. Mammoth Scarlet..Pkt., 10c |
| 2804. Mammoth Purple | " 10c | 2812. Mammoth Striped.....Pkt., 10c |
| 2806. Mammoth White | " 10c | 2813. Mammoth Mixed....." 10c |
| 2807. Mammoth Blue | " 10c | 2814. Collection of Mammoth Verbenas, |
| 2808. Mammoth Yellow | " 10c | 6 colors.....for 50c |
| 2809. Mammoth Auricula Eyed... | " 10c | 2815. Fine Mixed. All colors of the older sorts. |
| 2810. Mammoth Blue, White Eye | " 10c | oz., 75c; pkt., 5c. |
| 2799. Venosa. A strong grower, violet flowers. | An excellent subject for massed effects; flowers all summer | Pkt. 10c |

2816. **Verbena, Lemon Scented.** This fragrant plant is easily grown from seed, and succeeds well anywhere. Have a good bed of it in the garden every summer, that you can cut its fragrant foliage and flowers to make up with bouquets. Pkt., 5c.

ZINNIA

Youth and Old Age.

One of the most brilliant and showy of annuals, and has long been a general favorite. They come in flower early in the summer, and keep on blooming until hard frost; require little attention and succeed almost anywhere. For perfection of blossom start the seeds in March, and prick out once or twice before transferring to the open border in May or June. Provide the plants with plenty of room, at least 18 inches apart each way, and they soon completely cover the ground.

Culture. Should not be sown in the open ground before latter part of May. The best plan is to start the seeds indoors in a shallow box or in a hot bed, in a temperature of about 65 degrees. Cover the seeds to a depth of four times their size and press the surface firm with a board. Water with a fine spray. Transplant the seedlings after the second leaves form and remove to the garden when the weather is warm and settled.

Northrup, King & Co.'s Double Improved Large Flowering.

(Sold only in sealed packages.) This is considered the best type for general use, forming bushy, compact plants not over 2 feet high, and bearing flowers as large as the tallest varieties. In our special imported strains of Double Zinnias are found the most perfect and beautiful types which have yet been produced by the flower specialists of Europe and America.

We are confident that they will please all who grow them.

- | | |
|---|---------------------|
| 2817. Double White | Pkt. 5c |
| 2818. Double Orange | 5c |
| 2819. Double Salmon Rose | 5c |
| 2820. Double Scarlet | 5c |
| 2822. Double Canary | 5c |
| 2824. Double Jacqueminot | 5c |
| 2826. Collection, 6 separate colors for | 25c |
| 2828. Double Mixed, all colors, | oz., 40c; pkt., 5c. |

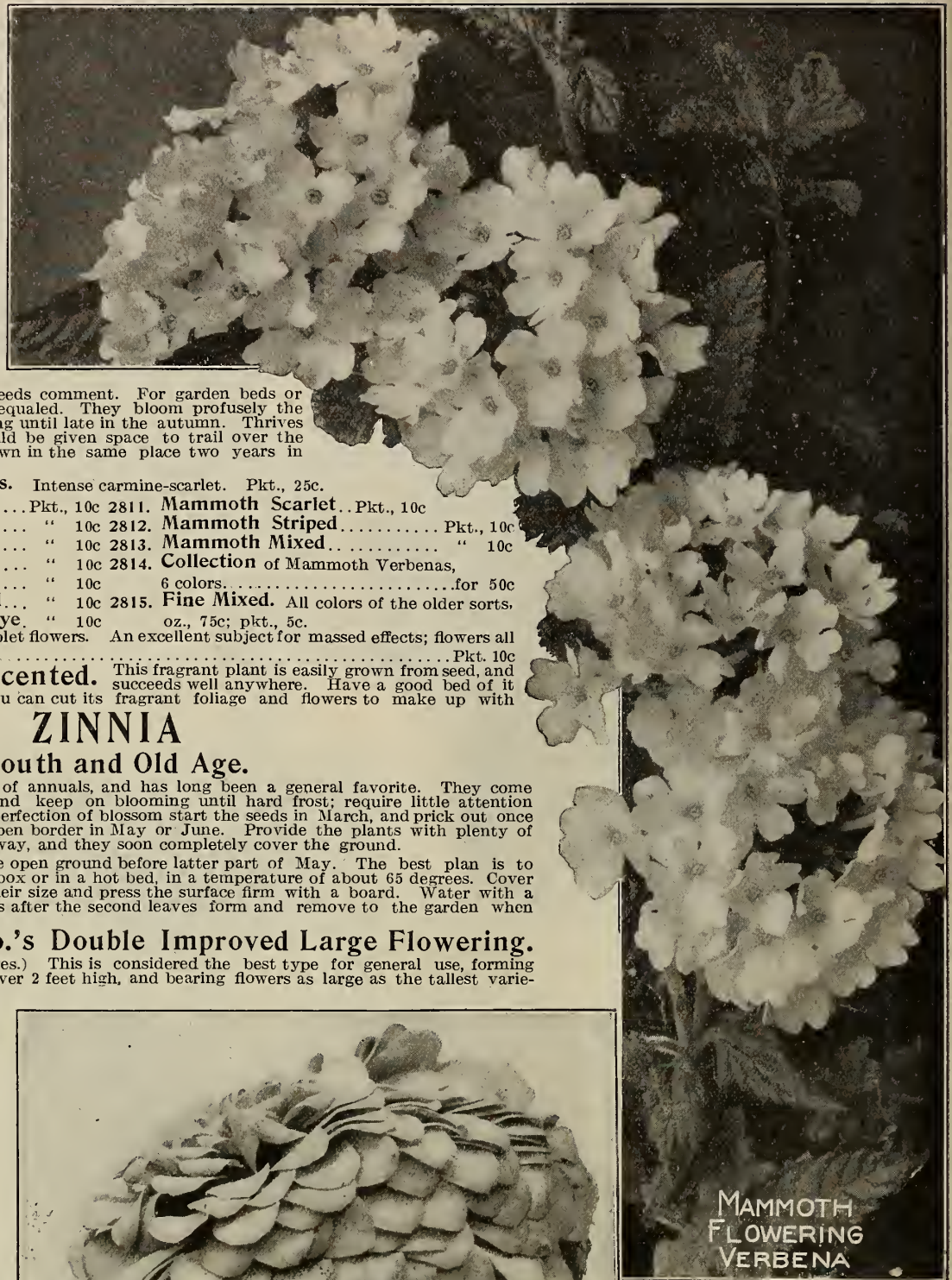
Books.

Home Floriculture. By C. N. Page. One of the most complete and intelligent books on this subject that we have yet seen. It contains chapters on propagating plants, how to prepare hot-beds and cold frames, lists of most desirable plants for home or garden culture, ornamental vines, hardy shrubs, plants for shady places, lawns, etc. It makes a book of 174 pages and is up-to-date in all particulars. We make a special low price, bound in paper covers, of 25c. postpaid. Money promptly refunded if this book is not satisfactory.

Home Floriculture. By E. E. Rexford. Practical guide on plants for house and garden. Price, \$1.00, (postpaid, \$1.15).



IMPROVED
LARGE FLOWERING ZINNIA



MAMMOTH
FLOWERING
VERBENA

Has Been a Delight.

Last year I wrote you that my Perfume Plants or Evening Scented Stock (*Matthiola Bicornis*) were a disappointment; that I could detect no perfume. That was because I failed to realize how purely an evening plant it was. You kindly sent me another package to try again. I did so and the result has been a delight this year; the plant being all you claimed; the whole yard being filled with the exquisite perfume. Seldom has an evening passed that I have not gone out in the yard to pick a few sprays of flowers for my room. (MRS.) S. M. BRECKENRIDGE, Cleveland, Ohio.

All flower and vegetable seeds sent prepaid except where otherwise noted.



AQUILEGIA. COLUMBINE



ACHILLEA



CAMPANULA PERSICIFOLIA

HARDY PERENNIAL FLOWER SEEDS

Culture. Everyone likes perennials because they are permanent—once established they increase in size and beauty. Many sorts are raised from seed, usually blooming the year after sowing. The seed bed must be well drained, fine and firm. If the soil is at all heavy cover with one inch of sand. The seed may be planted from June 10th to early July. After soaking the seed 24 hours, sow the fine sorts in rows, 3 inches apart, on the surface of sand or well sifted soil, and press down with a board. Large seeds may be covered to twice their thickness. The bed must be kept shaded constantly with a screen made as follows: nail common laths 2 inches apart on end strips. Place this screen over the bed on 4 bricks set endwise. Water as required; when seedlings have two pairs of leaves, transplant into rows a few inches apart each way, and later when they begin to crowd transplant a second time. This involves extra work but is necessary to raise sturdy plants. Keep them shaded with the screens all summer. In September, if well developed, they may be placed in their permanent locations where they are to blossom the following year, or left in the seed beds for early spring transplanting. After the ground freezes hard, cover with evergreen or other branches and a few inches of straw or leaves loosely piled on top. In late March, remove one-half the top mulch and loosen up the rest, to admit air. Take off the remainder gradually, as the season advances.

For Perennial Plants—see pages 82-88, also inside back cover.

3200. **Abronia. Sand Verbena.** Trailing plants and sweet scented, rosy-lilac flowers borne in clusters. Suited for rockeries. Pkt., 5c.
3202. **Achillea. Double White Yarrow.** One of the best hardy white perennials. Grows about two feet high and from spring until frost is covered with heads of purest white double flowers. Pkt., 15c.
3204. **Adonis vernalis. Spring Adonis.** One of the most attractive ever-blooming plants. Flowers bright yellow. Pkt., 15c.
3206. **Agrostemma. Rose of Heaven.** An attractive free-blooming, hardy perennial, of easy culture, producing bright colored flowers on long, slender stems. Blooms the first season. Fine for cutting. One to two feet. Pkt., 5c.
3208. **Alyssum Saxatile Compactum.** Has handsome masses of bright yellow flowers. Fine for borders. Pkt., 10c.
3209. **Anchusa, Italian Dropmore Variety.** Blue, large, forget-me-not-like flowers. Very fine for the back of the perennial border or for a screen. 5 feet high. Pkt., 10c.
- Anemone. Windflower.** A very pleasing, hardy perennial, producing large flowers; few plants compare with them in beauty; fine for bouquets. Anemones are especially good for rock work and sheltered banks. They need extra good winter protection.

3210. **Coronaria, Mixed Colors. Poppy Anemone.** Pkt., 5c.
3211. **St. Brigid.** A beautiful selection of the above, comprising semi-double and double flowers in a wonderful array of colors. Pkt., 15c.

3212. **Japonica Alba. The Bride.** Pure white. Pkt., 10c.

3214. **Anthemis tinctoria. Hardy Marguerite.** A native of England; grows about a foot high, bearing in profusion, daisy-shaped, yellow flowers which come in July and August. Pkt., 10c.

- Aquilegia. Columbine.** Charming hardy perennial plants growing from one to three feet high, bearing in countless numbers through May and June their exquisite blossoms of clear, blue, white, rose, yellow, purple, striped, etc. For planting in permanent borders or naturalizing along the edges of woods or shrubbery this old-fashioned favorite is one of the best of all hardy plants.

3213. **Northrup, King & Co.'s Single Long Spurred Hybrids.** All colors mixed. Pkt., 10c.

3215. **Northrup, King & Co.'s Double.** All colors mixed. Pkt., 10c.

3216. **A. coerulea alba.** Beautiful white flowers. Pkt., 10c.

3217. **A. coerulea.** Blue flowers from the Rocky Mountains. Pkt., 10c.

3218. **A. chrysantha.** Golden Spurred Columbine. Vigorous and bushy in habit. 2½ ft. Pkt., 10c.

3224. **A. Jaetschaut.** Yellow blossoms, with carmine spurs. Pkt., 10c.

3219. **A. oxyspala.** One of the most charming of all the Columbines. It is a native of Siberia; very hardy and seems to be more permanent than many species. Pkt., 15c.

3220. **A. sibirica.** A fine purple-flowered species. One of the best. Pkt., 10c.

3229. **A. Skinneri.** Beautiful orange scarlet centre with yellowish green border. Pkt., 10c.

3221. **A. vulgaris.** Perfectly hardy and of easy culture. Mixed colors. Pkt., 10c.

3222. **Arabis albida.** A low, early blooming perennial with white, fragrant flowers. For rock work, borders or covering steep banks. Pkt., 10c.

3223. **Armeria plantaginea. Sea Pink. Thrift.** Flowers in close, round heads; color shaped like white clover heads, fine for bouquets. Pkt., 10c.

- Bellis. English Daisy.** Daisies are easily raised from spring sown seed, and come into flower in a very short time. They thrive best in cool, shady places, but do well in almost any soil. They are very pretty when in bloom and deserve to be grown more universally than they are. Admirably adapted for edgings, borders, and low beds.

3225. **Giant Red.** Beautiful double flowers in red tints. Pkt., 10c.

3226. **Snowball.** Best pure white Daisy, on long stem. Pkt., 10c.

3227. **Double Mixed.** Embracing all colors. Pkt., 10c.

3228. **Callirhoe involucrata. Poppy Mallow.** A trailing perennial of the Malva family, bearing a profusion of large, violet-crimson poppy-shaped flowers. Hardy and easy of culture. Pkt., 10c.

All flower seeds sent prepaid, see page one for parcel post rates and general suggestions.

BELLIS. ENGLISH DAISY



CANTERBURY BELLS



COREOPSIS



SHASTA DAISY

GYPSOPHILA
BABY'S BREATHDIGITALIS
FOXGLOVE

Campanula. Bellflower. Beautiful, hardy, herbaceous perennials, bearing a great profusion of attractive bellflowers; thrive best in light soil. They will continue to bloom for weeks if given a partially shaded location.

3230. *C. carpatica*. Very charming plant six to eight inches high, deep blue flowers. Pkt., 10c.
 3232. *C. glomerata*. One to two feet high. Flowers bluish-violet and white. Pkt., 10c.
 3234. *C. persicifolia*. Flowers blue, shading to white. Pkt., 10c. See illustration, page 77.
 3236. *C. punctata*. 15 to 18 inches high; flowers nearly white, spotted with red. Pkt., 10c.
 3238. *C. pyramidalis*. Steeple Bells. Chimney Bellflower. Blue or white. 4 or 5 ft. Pkt., 10c.
 3240. *C. Raineri*. A dainty little plant; will succeed in any good soil. Pkt., 10c.

Canterbury Bells. Campanula calycanthem. beautiful single flowers three inches in length with saucers three to four inches in diameter. The plants form pyramids of bloom bearing from 100 to 200 of these exquisite blossoms for weeks during the early summer. A hardy biennial 2½ feet high, flowering the second season from seed. See illustration, page 77.
 3242. Rose—Delicate rosy-pink. Pkt., 10c 3248. White—Pure white. Pkt., 10c
 3244. Blue—A fine clear shade. Pkt., 10c 3250. Mixed—All colors. Pkt., 5c
 3246. Striped—White, striped blue. Pkt., 10c

Canterbury Bells. Campanula medium. The old-fashioned variety which produces large, bell-shaped flowers.
 3252. Single Mixed—All colors. Pkt., 5c 3254. Double Mixed—All colors. Pkt., 5c

Chrysanthemum. daisy, but twice as large. Handsome when in flower and the flowers have good stems for cutting. Hardy and easily grown in full sun. Pkt., 10c.
 3260. *C. Shasta Daisy*. A hardy perennial bearing large pure white flowers, sometimes four inches in diameter, in great profusion on long, stiff stems fully two feet long. Pkt., 15c.
 See illustration on inside back cover.

3262. **Coreopsis. C. lanceolata.** A hardy perennial about 2 feet high. This produces an abundance of large, daisy-shaped flowers on long stems. One of the best of all perennials for cut flowers. Pkt., 10c.

Delphinium. Hardy Larkspur. Very decorative border plants ranging in height from the 18 inch Cashmerianum to the stately Hybrids, 5 to 6 feet tall, whose side shoots flower after the main spike has finished, thus prolonging the blooming period. If the flower spikes are removed as soon as they fade, new ones will continue to appear, at intervals all summer. The colors run from pure white to darkest blue. Some varieties have a black center, others show a pleasing contrast, in shades of blue, between the inner and outer petals. Stake all varieties when 18 inches high to prevent them being blown down. For cultural directions see top of page 77.

3266. *D. elatum*. Flowers very fine, dark to pale blue. Pkt. 10c
 3268. *D. Cashmerianum*. From the Himalayas, 10 to 18 inches high. Spreading, many branched. Flowers often 2 inches wide, azure blue. Upper petals almost black. Pkt., 15c.
 3270. *D. Caucasicum*. Tall with handsome blue flowers. Pkt., 10c.
 3272. *D. formosum*. Flowers sky blue, shaded with indigo, 18 to 36 inches. Pkt., 10c.
 3275. *D. Gold Medal Hybrids, Mixed*. Unquestionably the finest strain of mixed hybrids ever offered. The original stock came from England, and consisted of the best-named varieties. The plants are of strong, vigorous habit, with large flowers in massive spikes, the majority running in the lighter shades of blue. Pkt., 25c; 5 pkts., \$1.00.
 3276. *D. grandiflorum*. SIBERIAN LARKSPUR. Various tinted flowers from deep blue to white. One of the best. Pkt., 10c.
 3278. *D. nudicaule*. SCARLET LARKSPUR. Numerous short spikes of very red flowers, very attractive. Blooms first year from seed. Pkt., 10c.
 3280. *D. Sp., Kelway's Selection*. One of the finest yet offered. Flowers variable. Pkt., 15c.
 3282. *Delphinium, Mixed*. This fine mixture embraces all the preceding varieties, with several others not herein named. Pkt., 10c; ¼ oz., 25c; 1 oz., \$1.75.

Digitalis. Foxglove. A very interesting family of old fashioned plants, whose culture is so simple as to bring them within the reach of all.

3285. *D. ambigua*. Yellowish flowers, quite pretty. Pkt., 15c; ¼ oz., 30c.
 3287. *D. purpurea*, var. *gloxinioides*. This has a very great variety of colors, but as it is difficult to keep them true when growing separately, we offer it only in a mixture. Everyone should plant this strain. It grows in strong clumps and is one of our very finest hardy perennials. Pkt., 10c.
 3289. *D. Sibirica*. Flowers are creamy white and quite attractive. Pkt., 10c.

3290. **Eryngium. Sea Holly.** Has heads of handsome amethyst-blue flowers. Pkt., 10c.

Gaillardia. Blanket Flower. A very free blossoming perennial bearing large yellow or red daisy-shaped flowers all through the summer. Easy to grow. See page 62.

3292. *G. Aristata*. Red and yellow. Pkt., 10c.
 3294. *G. Coppery Red*. Bears very large blossoms, coppery red shading into a lighter tone at the tips of the petals. Pkt., 25c.
 3291. *G. Semi-double Hybrids*. Pkt., 10c.
 3293. *G. Sulphur Eye*. Pale sulphur yellow with maroon eye. Pkt., 10c.
 3297. *G. Mixed*. A choice combination of all varieties. Pkt., 10c.

Geum. Flowers are large butter-cup shaped, borne in profusion; lasting well when cut, they are fine for bouquets.

3286. *G. Double Scarlet*. Large flowers, fine color. 2 feet. Pkt., 10c.
 3288. *G. Single Orange Scarlet*. Pkt., 10c.

3295. **Golden Rod. Solidago Canadensis.** The well known, golden yellow favorite. Pkt., 5c.

For culture of perennials see top of page 77; see also cultural note on Phlox, page 87, which applies to nearly all other perennial plants, as well.

See pages 82-88 and inside back cover for perennial plants.

DELPHINIUM
HARDY LARKSPURGAILLARDIA
COPPERY RED

HOLLYHOCKS.

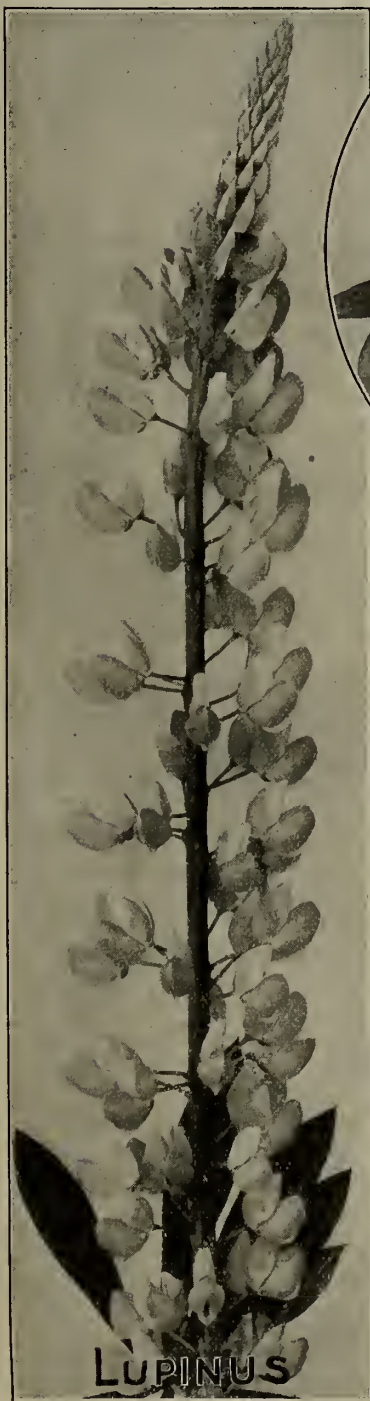
There is a revival of the old-fashioned flowers and Hollyhocks are among the best of the old garden favorites. Always a stately and majestic plant, the improvements in them have been so great that one would scarcely recognize in the old single Hollyhock, the parent of the magnificent and truly gorgeous flower of today.

The most marked improvement is found in the Chater's and Allegheny strains. These are beautiful beyond description.

The Chater's produce for the most part, flowers which are densely double, although occasionally are seen among them some single blossoms. The colors are innumerable ranging from pure white to darkest maroon, some are bright and gay, others of the softest and most delicate shades and tints. The stalks average about four feet in height but many are 6 and even 8 ft. high. These stalks are densely covered with blossoms as beautiful in texture and appearance as the rose.

The Allegheny is of quite recent introduction. It grows very tall, and the flowers, though single, are of wonderful beauty and in great variety of color. The Chater's are beautiful beyond description, but the Allegheny is thought by many to be even still more beautiful than the Chater's. Hollyhocks form a capital background for a border of hardy perennials of lower growth, and are also very effective when planted in groups. Once established, as they easily are from seed, they re-appear in their place each year. Hollyhocks thrive best in a rich, deep, well drained soil. As usually treated, the Hollyhock is a biennial, but if planted where the water will not settle around the crown in the winter they become very satisfactory perennials. See page 83 and inside back cover for plants.

3325. Single Hollyhocks. Many prefer the single-flowering Hollyhocks. They are usually of freer growth than the doubles and present a very handsome appearance when covered with their artistic blossoms. Pkt., 10c.



Chater's Double Hollyhocks.

- | | |
|--|----------------------------------|
| 3305. Double White.....Pkt., 10c. | 3308. Bright Red.....Pkt., 10c. |
| 3306. Yellow.....Pkt., 10c. | 3309. Bright Pink.....Pkt., 10c. |
| 3307. Salmon Rose.....Pkt., 10c. | 3310. Maroon.....Pkt., 10c. |
| 3315. Chater's Selected Strain. Extra Choice Double Mixed. Oz., \$1.00; pkt., 10c. | |

3320. Allegheny Hollyhocks. The flowers are of mammoth size and are wonderfully formed of loosely arranged fringed petals which resemble the finest China silk and have none of the formality of the ordinary type. This variety is a perpetual bloomer and has from 2 to 4 buds at the base of each leaf. The buds develop into flowers in rotation, the largest buds first, then the smaller ones, until all have become a beautiful mass of bloom. The colors vary from the palest shrimp pink to deep red. Although the flowers are single they are very beautiful and must be seen to be appreciated. The plants are of strong growth, sending up spikes 6 to 7 feet high. Mixed colors, pkt., 10c.

3296. Gypsophila Paniculata. Baby's Breath. Bridal Veil. The plants are small, starlike and borne in feathery sprays, which are highly esteemed for cut flowers as they lend a most graceful effect when combined in bouquets. This pleasing flower should be in every garden, for it may be said to be almost indispensable in the arrangement of flowers, either in vase or bouquet work. Its misty veil-like appearance when used with other flowers produces a most charming effect. Pkt., 5c; ¼ oz., 15c.

3298. Helenium autumnale. A showy native perennial growing 4 to 6 feet high which forms a good sized bush covered in autumn with single bright yellow flowers giving it much the appearance of the pompon Chrysanthemum. Very valuable for use among shrubbery, lasting in bloom a long while and at its best when most plants are through blossoming. Pkt., 10c.

3300. Hesperis Matronalis. Sweet Rocket. Old-fashioned garden plant, and among the most desirable of hardy flowers; also known as Dame's Rocket and Dame's Violet; grows from 2 to 3 feet high, and bears spikes of showy white, lilac and purple fragrant flowers. Excellent for naturalizing among shrubbery or for planting in a permanent border; mixed colors. Pkt., 5c.

Hibiscus. Marsh Mallow. **3301. H. Giant Golden Bowl.** The flowers of this magnificent Hibiscus are from 6 to 9 inches in diameter, their color is a rich, deep cream with a velvety, maroon center. Plants grow from 3 to 5 feet high, and bear from 10 to 20 of their gigantic, bell-shaped flowers at one time. They commence to bloom when the plants are quite young and continue until late in the fall. Pkt., 10c.

3302. H. Crimson Eye. Flowers are pure white, with a rich crimson eye. The flowers are very large, often measuring 7 inches in diameter. It blooms from seed the first year sown in the open ground, lasts year after year. Pkt., 10c.

3327. Honesty. Satin Flower. Early flowering, hardy biennial, with purple or white flowers, and flat round seed-vessels of silvery appearance. Rather curious, but beautiful, and very useful, as house ornaments, 2 ft. ¼ oz., 15c; pkt., 5c.

3329. Iberis sempervirens. Perennial Candytuft. Very desirable plants growing 10 to 15 inches high with glossy, dark, evergreen foliage completely hidden with dense flat heads of white flowers in early spring. Pkt., 10c.

3330. Lathyrus. Everlasting or Hardy Sweet Pea. Showy, free flowering, hardy perennial climber, valuable for covering old stumps, fences, etc., continually in bloom. Good for cut flowers. They require a rich, deep soil. Pkt., 10c.

Perennials arranged according to height. Back row—Hollyhocks, tall Delphiniums, Lupines, Hibiscus, Rudbeckias and Sunflowers; Second row—Achillea, Campanulas, Chrysanthemums, medium Delphiniums, Digitalis, Gypsophila, Pæonies, Helenium, Pentstemon, Oriental Poppies, Physostegia and Platycodons; Third row—Gaillardias, Coreopsis, Sweet William, Scabiosa, Aquilegia, Iceland Poppies, Lychnis, Linum, Monarda Didyma, Phlox, Iris, Lathyrus, Stokesia, Scabiosa and Veronica.

COREOPSIS
LANCEOLATA
GRANDIFLORA



3332. **Lavender.** *Lavandula Vera.* The delightfully fragrant old fashioned plant grown so much for perfuming linens, for which purpose the dried flowers are used. Hardy perennial about 18 inches high, makes an excellent border plant. Pkt., 10c; oz., 50c.

3335. **Liatris. Blazing Star.** Very showy and attractive plants with long spikes of purple and rosy purple flowers from July to Sept. Mixed varieties. Pkt., 10c.

3337. **Linaria. Kenilworth Ivy.** Lavender and purple. A charming, neat, hardy, trailing plant. For baskets, vases, pots and rock-work. Pkt., 10c.

Linum perenne. A pretty plant for the border, with light graceful foliage and large flowers produced through the entire summer. Flowers delicate light blue and pure white; similar to single poppies 12 to 15 inches high. Pkt., 10c; oz., 50c.

3339. **Blue.** Pkt., 5c. 3341. **White.** Pkt., 5c. **Lobelia.** The following dwarfs and trailing varieties of this popular and beautiful, flowering plant will be found most desirable for pot culture, edgings, hanging baskets, etc., blooming profusely from June to November. The hardy perennial varieties are among the most attractive of our garden favorites, producing handsome flower spikes.

3342. **Crystal Palace Compacta.** Rich deep blue; dark foliage; the finest dark blue for bedding. Pkt., 10c.

3343. **Mixed Compacta Varieties.** All colors, pkt., 10c.

Lupinus. Wild Lupine. This will be found a great acquisition to any garden. It forms dense bushes about 4 feet high, of elegant spikes completely clothed to the ground with snowy-white and deepest sea-blue flowers. See illustration page 79. Delicately fragrant. 3345. **Mixed**, pkt., 10c.

3347. **Lychnis. Rose Campion.** Handsome plants of easy culture, growing in any rich garden soil; for massing in beds and borders; blooms the first year if sown early. Flowers white, scarlet, orange, etc. Mixed colors, pkt., 10c.

3262. **Coreopsis lanceolata grandiflora.**

This is one of the best of all perennials for cut flowers. Beginning to bloom in June, it continues to display a profusion of golden blossoms all through the hot weather, uplifted on graceful stems well above the foliage. And how they do last! Often a week or more if cut as soon as they open. We cannot recommend *Coreopsis* too highly, so would suggest that you try a few plants this summer and sow seed now for a big bed next year. For culture see page 77, for plants see page 82. Pkt., 10c; 1/4 oz., 20c.

3349. **Lythrum roseum superbum.** Pretty, hardy perennial; grows three feet high and produces spikes of rosy flowers from July to September. Pkt., 10c.

Mimulus. Showy, profuse flowering plants, comprising numerous varieties with white, sulphur and yellow grounds, spotted with crimson, scarlet and pink, fine for greenhouse or moist, shady situations; half hardy perennials, blooming the first year from seed if sown early; 1 ft.

3351. **Tigrinus. MONKEY FLOWER.** Fine mixed, spotted varieties. Pkt., 5c.

3353. **Moschatus. MUSK PLANT.** Fine for hanging baskets, etc.; small yellow flowers. Fragrant foliage. Pkt., 5c.

3355. **Monarda. Oswego Tea or Bee Balm.** Fine hardy plants of free growth, about 3 feet high, with aromatic foliage, and bright rose and crimson-scarlet flowers in July and August. Mixed, pkt., 15c.

3357. **Musa Ensete. Abyssinia Banana.**

A tender perennial, ornamental foliage plant, growing to a height of 10 to 20 feet. Very effective when planted singly or grouped with other foliage plants. 10 seeds, 20c.

Myosotis. Forget-Me-Not. Half-hardy perennial, which flowers the first year from seed if sown early. Will bring forth lovely blossoms throughout the whole summer and fall. Flowers are borne on long, stiff stems and of the most exquisite sky-blue, with a delicate white center. They succeed best with moisture in a somewhat shaded position.

3359. **Blue.** Pkt., 5c. 3361. **White.** Pkt., 5c.

3363. **Mixed.** All varieties, oz., 30c; pkt., 5c;

3365. **Pentstemon. Beard Tongue.** Attractive plants, much used in the hardy border. The bushes are pyramidal, 2 to 3 feet high, with erect branches thickly set with flowers 1 1/2 inches long, varying in all shades from rosy-white to purple with white or veined throats. Mixed colors, pkt., 5c.

3367. **Physostegia. False Dragon Head.** For illustration see handsome plants flower from July until frost, growing 3 to 4 feet high and bear broad, dense spikes of delicate pink tubular flowers not unlike a giant heather. Pkt., 10c.

3369: **Platycodon grandiflorum. Japanese Bell-Flower.**

A member of the Campanula family with handsome, branching spikes 2 to 4 feet high. *Platycodon* is considered by many the best bell flower. The illustration, page 81, shows one of the blooms with which the whole spike is furnished. They bear these large, showy, deep-blue or white flowers continuously from July until frost. Of easy culture. Pkt., 10c.

Perennial Poppies. These hardy varieties are very beautiful, blooming from June to frost.

3371. **Iceland Poppy.** Similar to the annual Shirley Poppy but in addition to the white, red and pink shades of the latter, the Iceland Poppy is often a fine yellow or orange color. Pkt., 10c.

3373. **Oriental Poppy.** One of the most gorgeous of all perennials, producing in June and July its enormous blossoms, often 6 inches in diameter. The colors range from soft blush and rose to flaming scarlet and richest maroon. The flower stems are long and heavy, bending gracefully under the weight of the blossoms. The culture is simple if the directions at the top of page 77 are followed. The plants are at their best when about 3 years old. Often one specimen will show 10 or 15 blooms. All colors mixed. Pkt., 10c.

3374. **Princess Victoria Louise. Salmon Queen.** An Oriental Poppy of an exquisite shade of salmon pink; fine for cutting or for a border plant. Pkt., 25c.

3375. **Fringed Alpine.** Will flower first season if sown early. Flowers are white, rose, salmon or orange. Pkt., 10c.

Polemonium. Jacob's Ladder. Highly ornamental perennial; foliage deeply cut; flowers in clusters of blue and white. 3382. **Deep Blue**, pkt., 10c. 3378. **Pure White**, pkt., 10c.

3377. **Polygonum compactum. Knotweed.** Excellent hardy perennial of dwarf habit, forming bushes 12 to 15 inches high, which are completely covered with a mass of foamy white flowers throughout the fall. Pkt., 15c.

Special Plant Offer

Grandmother's Collection of Six Hardy Garden Plants, including one of each of the following: Canterbury Bells, Shasta Daisy, Delphinium, Gaillardia, Hollyhock and the beautiful *Coreopsis* illustrated above. See inside back cover. By express at purchaser's expense, \$1.25, or sent prepaid for \$1.75.



3400. Stokesia Cyanea. Cornflower Aster. It grows from 18 to 24 inches high and bears freely, from July to October handsome, blue, Aster-like blossoms, measuring 4 to 5 inches across. It succeeds well in an open, sunny location. It is also fine for the hardy border and for massing. Pkt., 10c.

Sunflower. Helianthus. Seeds sown early will produce flowering plants the first year. Hardy perennial Sunflowers are fine subjects for the border.

3402. Maximiliana. Flowers single, clear yellow, with several rows of large ray petals and full center. Blossoms late in the autumn. Height, 6 feet. Pkt., 10c.

3404. Mollis. Rich, bright yellow flowers with silvery white foliage. Height, 6 feet. Pkt., 10c.

3406. Multiflorus fl. pl. Dwarf double yellow like an Aster; blooming in August. Pkt., 10c.

Sweet William. Dianthus Barbatus.

A beautiful, free blooming, hardy perennial producing a splendid effect in beds and borders with rich and varied flowers. The demand for separate colors has induced us to offer several sorts.

3408. Single White. Pkt., 5c.

3410. Single Crimson. Pkt., 5c.

3412. Single Scarlet. Pkt., 5c.

3414. Single Velvety Black Maroon. Pkt., 5c.

3416. Red, with white eye. Pkt., 5c.

3418. Single Violet, with white eye. Pkt., 5c.

3420. Single Mixed. All colors, oz., 25c. Pkt., 5c.

3424. Tritoma. Red Hot Poker. Although these are hardy plants, many will flower the first year if seed is sown early. They grow about 3 feet high and bear in August blazing, orange-red spikes, blooming until frost. Very effective for cut flowers. Pkt., 10c.

3425. Verbascum Hybrids. Ornamental plant growing 3 feet high. Long silvery foliage in all shades of pink and violet. Excellent for cutting or for use as a single specimen plant. Pkt., 10c.

Veronica. Speedwell. **3426. V. Spicata.** Height, 18 inches, flowers all summer; showy spikes of bright blue flowers. Fine for cutting. Pkt., 10c.

3428. V. Rosea. Bright rose-colored flowers, produced on spikes 12 to 18 inches long. Pkt., 15c.

Wallflower. Half hardy perennials bearing dainty, yellowish, red or orange flowers which have a delicious odor.

These new, early-flowering varieties may be treated as annuals, and if sown in heat during February or March, the plants will bloom freely through the summer and autumn. Excellent for forcing. Height 2 feet.

3434. Single Mixed. All colors. Pkt., 5c. **3436. Double Finest Mixed.** Pkt., 10c.

Special Perennial Offers. Raise your own perennial plants from seed. It is not difficult if you follow the directions on page 77. At the slight expense for seed and labor you can obtain a fine assortment of these valuable plants which would cost many times as much to secure in any other way.

12, 10c. pkts., customer's selection, \$1.00, postpaid. 25, 10c. pkts., customer's selection, \$2.00, postpaid.

50 of any pkts., of perennial seeds, \$5.00, postpaid.

132 pkts., complete collection of all varieties of perennial seeds on our list, \$12.00, postpaid.

3379. Potentilla. Dark Red Cinquefoil. This plant has just the good qualities one expects in a border plant, handsome foliage, free blooming habit and easy culture. It grows 18 inches high, bearing from July to autumn its brilliant dark red flowers in profusion. These blossoms are much the shape of a buttercup. The plant is of bushy growth, throwing up each year its stiff, erect stems, in appearance resembling a low shrub more than the ordinary perennial plant. Pkt., 15c.

3386. Primula Japonica. Japanese Primrose. These are not so well known as they deserve; they are hardy, of free, vigorous growth, with dark green foliage, and send up in the late spring innumerable sprays of large flowers in many colors varying from white to crimson. A moist, rich, almost boggy soil is wanted for this fine plant. Very fine for naturalizing in grove or on a hillside. Mixed colors varying from rich crimson to white. 1½ feet in height. Pkt., 15c.

3380. Pueraria Thunbergiana. Japanese Kudzu Vine. The fastest growing hardy plant. Bears small racemes of rosy purple pea-shaped blossoms in August. Grows 10 feet the first year from seed. Pkt., 10c.

Rudbeckia. Cone Flower. Splendid plants for interplanting with shrub-very or for a tall border. They are free-flowing with blossoms like a small sun-flower, as suggested by the illustration below. These are borne on strong, erect stems, excellent for cutting. They are of remarkably easy culture, seldom attacked by insects or disease. The plants should be staked when 3 feet high. Keep blossoms cut to prolong the blooming season.

3390. R. Fulgida. Very effective variety, producing in August and September, masses of brilliant, orange-yellow flowers, 3 feet. Pkt., 10c.

3392. R. Newmani. Magnificent autumn flowering perennial; flowers large, bright orange-yellow petals; center maroon, cone-shaped. 3 feet. Pkt., 15c.

3394. R. Purpurea. A most striking hardy perennial; flowers all summer; very large, reddish-purple, an unusual, but attractive color. 3 feet. Pkt., 15c.

3396. Scabiosa caucasica. While resembling in shape the annual Scabiosa, illustrated on page 71, this hardy variety bears large blossoms of a delicate lilac blue shade. The plants grow about 2 feet high, blooming from July until frost. A fine plant for borders or cut flowers. Pkt., 15c.

3397. S. perfecta. Outer petals azure blue, center lilac. Unusually fine. Pkt., 25c.

For culture of perennials see top of page 77. See pages 82 to 87 and inside back cover for hardy perennial plant list.

Best Perennials for Cut Flowers. Achillea, Anemone, Aquilegia, Campanula, Coreopsis, Delphinium, Digitalis, Forget-me-not, Gaillardia, Gypsophila, Iris, Iberis, Lathyrus, Physostegia, Platycodon, Paeonies, Phlox, Scabiosa, Stokesia, Sweet Williams, Shasta Daisy, Tritoma and Veronica.



HARDY PERENNIAL FLOWERING PLANTS

For Permanent Planting in Borders or Beds.



There is an increasing demand for plants that are perfectly hardy, and do not have to be taken up every fall or replaced every spring. The following list has been selected with care and contains a fine assortment of plants that make valuable permanent borders.

The old-fashioned gardens of our grandmothers contained a wealth of gorgeous bloom throughout the entire summer from early spring until autumn. These gardens are again coming into popular favor, and since the advent of the new and highly improved strains of Hollyhocks, Paeonies, Iris, Phlox, etc., it is possible to convert them into veritable bowers of beauty by a liberal display of hardy herbaceous perennials. Beginning almost before the snow is off the ground, early-flowering varieties open their blossoms, as welcome harbingers of spring. Almost every week until late in the fall some new variety bursts forth into entrancing loveliness, blooming so persistently as to almost defy Jack Frost in his

efforts to subdue the floral kingdom. A start may be obtained at so small an expenditure as not to be counted when measured with the satisfaction and pleasure derived from them. Once planted they are there to stay, requiring very little care, increasing in size and bloom and growing better from year to year. Herbaceous means "like an herb," that is, the branches above the ground are not hard and woody, as with shrubs and trees. Perennial plants are those that live year after year, only dying to the ground in winter, the roots remaining alive and dormant in the ground; this distinguishes them from annuals which must be raised from seed each season. Send in your order in advance so that the plants can be sent in time to get an early start. See inside back cover page.

Key to size and blooming period. To assist the buyer in making selections from groups and in their proper arrangement when planting, we give average height and season for blooming, using figures for the months. Thus, "3-4 ft., 7-9" means that the species under ordinary conditions attains a height of three to four feet and blooms in the months of July, August and September.

The price in every case, is for strong, field grown plants, for shipment by freight or express at purchaser's expense. If single plants are wanted by mail, add 10c each to cover cost of mailing. Six at dozen rate, 25 at 100 rate. See note at foot of this page.

Achillea, The Pearl. One of the very best white flowered border plants, resembling Pompon Chrysanthemums. See page 77 for illustration. Each, 20c; doz., \$2.00.

A. Millefolium Roseum. Finely cut foliage, flat flower-heads, color magenta. Each, 20c; doz., \$2.00.

Anemone Japonica. Wind Flowers. A most valuable class of hardy plants suitable for edging, massing or single specimens. They grow rapidly 2 to 3 feet and are profuse in bloom, gaining strength and beauty each year. The blooming period extends from August till mid-November, the large open flowers furnishing abundant cut flowers and a brilliant field display. Each, 20c; doz., \$2.00.

Aquilegia. Columbine. The distinct, clear-cut foliage and delicate arrangement of colors in the flowers of Columbine, make it one of the showiest and most desirable of the hardy garden plants; especially suitable for rockwork, at the base of foundation walls, and under trees.

A. Coerulea. A beautiful Rocky Mountain species with broad flowers, often 3 inches in diameter; the outer sepals deep lilac or blue, petals white, the deep blue spur, tipped green. Each, 20c; doz., \$1.75.

A. Coerulea Hybrids. Beautiful variations from the standard type. See illustration on page 77. Each, 20c; doz., \$1.75.

A. Chrysantha. Golden yellow flowers with long spurs; one of the most distinct of the family. Each, 20c; doz., \$1.75.

A. Nivea Grandiflora. Pure white. Each, 20c; doz., \$1.75.

Artemisia Frigida. Wormwood. 1 ft., 9-10. From Siberia. Very finely cut silvery foliage. Will thrive in poorest soils. Useful and quite ornamental plants for the border or shrubbery, thriving in any ordinary soil. They have an agreeable aromatic odor and the foliage which is ornamental, possesses well known medicinal virtues. Each, 20c; doz., \$2.00.

Asters. Michaelmas Daisies. Bloom all summer in great profusion. 3 feet.

A. Novae Angliae. Its deep bluish purple flowers make a charming show after many fall plants have succumbed to the cold. Each, 20c; doz., \$2.00.

Boltonia Asteroides. False Chamomile. Bushy plants 5 feet high, with Aster-like white flowers. Each, 15c; doz., \$1.50.

B. Latisquama. Lavender pink flowers. Good cut flower. Each, 15c; doz., \$1.50.

Campanula Carpatia. Carpathian Hare-bell. A pretty compact species, not exceeding 8 inches high, flowers clear blue, 1 inch in diameter. Each, 20c; doz., \$2.00.

Campanula Medium. The well known "Canterbury Bells." Bloom in July; height 2 to 3 feet. Blue, rose or white. Each, 25c; doz., \$2.50.

C. Persicifolia. Peach Bells. 1½ to 2 feet high; blue, salver-shaped flowers. Each, 20c; doz., \$2.00.

C. Pyramidalis. Chimney Bell-flower. Very conspicuous; 4 to 5 feet high. Salver-shaped blue flowers borne profusely in September. Each, 20c; doz., \$2.00.

Clematis. Virgin's Bower. These are the low growing, somewhat creeping varieties, and are distinct from the climbers. They are of nice habit and invaluable for combinations in mass planting.

C. crispa. LEATHER FLOWER. 4 ft., 6-8. Showy, deep lavender, bell-shaped flowers with white throats. Each, 35c.

C. erecta coerulea. 2 ft., 6-7. Upright in habit with pretty bluish flowers. Each, 35c.

Coreopsis Lanceolata. A beautiful hardy border plant, 15 to 18 inches high; bright, golden-yellow flowers the entire season. Makes a handsome vase flower when cut. Each, 20c; doz., \$2.00.

Coreopsis Lanceolata Grandiflora. Superior to original form in early blooming, size of flowers and brilliancy of color; equally free. See illustration on page 80. Each, 25c; doz., \$2.50.

Shasta Daisy. These new hybrids of Shasta Daisy give different forms of flowers and much larger bloom ranging in shape from fully double to single; and in color, from pure white to pale lemon yellow—some solid color, some prettily variegated with yellow discs. The plants are extremely productive of bloom, making as spectacular a field show and as profitable a cut flower supply as any Hardy Perennial. See illustration, inside back cover. Each, 25c; doz., \$2.50.

For Any Perennial Plants. Where price is 15c each, we furnish 3 for 40c; where 20c each, we furnish 3 for 50c; where 25c each, we furnish 3 for 65c, by express at purchaser's expense.



Campanula. Canterbury Bells.



DIELYTRA
BLEEDING HEART

Delphinium. Perennial Larkspur. Long, showy spikes of flowers persist from June till frost and furnish the most satisfactory blues. See inside back cover page.

D. Chinensis. Fine stems and deeply cleft foliage; flowers showing all lighter shades of blue. 18 in. Each, 20c; doz., \$2.00.

D. Chinensis Alba. Pure white flowers. Each, 20c; doz., \$2.00.

D. Formosum. The old fashioned very dark blue variety. 3 to 4 feet. Each, 20c; doz., \$2.00.

D. Coelestinum. A charming delicate blue. Each, 20c; doz., \$2.00.

D. Hybridum. A choice strain of Hybrids embracing all shades of blue and purple. Each, 20c; doz., \$2.00.

Dianthus Barbatus. Sweet William. A fine old garden favorite, biennial, but one which perpetuates itself by self sowing. Height 18 inches. Flowers in June and July. The colors are very bright and effective and in an endless variety of white, pink, purple, crimson and scarlet; many sorts variously edged, eyed and spotted. Single and double varieties mixed, each, 20c; doz., \$2.00.

Dielytra. Bleeding Heart. The pink and white heart-shaped flowers are borne on long graceful stems, making the plant, with its finely cut foliage, very attractive. The plants increase in size from year to year and are beautiful, even when not in bloom. See illustration on page 82. Each, 25c; (postpaid, 35c); doz., \$2.50.

Digitalis. Fox Glove. Furnishes a grand display of thimble-shaped flowers in immense spikes during July and August. See page 78 for illustration.

D. Gloxiniaeflora Alba. White. Fine for cutting. Each, 25c; doz., \$2.50.

D. Gloxiniaeflora Rosea. Rose colored; bright and showy. Each, 25c; doz., \$2.50.

Funkia subcordata. White Day Lily. Wide circles of broad leaves. Flowers large, waxy white, borne in large trusses. Very fragrant. See illustration below. Each, 25c; doz., \$2.50.

F. Lancifolia Variegata. Slender lanceolate leaves margined with white; pale lilac flowers. Each, 25c; doz., \$2.50.

F. Undulata. Graceful, narrow leaves having a fluted white edge. Each, 25c; doz., \$2.50.

F. Speciosa Japonica Alba. Has pure white flowers, 4 to 4½ inches long, 10 to 15 growing on a 2 foot stem. Foliage is pale green. Each, 35c; doz., \$3.50.

Geranium Sanguineum. Cranesbill. A compact bush 18 inches high, with graceful cut foliage and an all summer's profusion of blood red flowers. Each, 25c; doz., \$2.50.

Gaillardia Grandiflora. Blanket Flower. Makes one of the most gorgeous and prodigal displays of all perennials. Flowers often measure 3 inches in diameter, on clean 2 foot stems. A hard center of deep maroon is thickly bordered by petals of orange and yellow, strikingly ringed by circles of crimson, red and maroon. Poor soil will do, and a constant show is assured from June till frost. Each, 25c; doz., \$2.50.

Gypsophila Paniculata. Baby's Breath. Good for cutting as well as for borders. Flowers are minute but myriad, pure white, produced in immense panicles. Each, 25c; doz., \$2.50.

Hardy Ornamental Grasses. In the laying out of lawns and artistic gardens, a few of the many beautiful hardy grasses should not be overlooked. Their stateliness, tropic luxuriance, and soft colors harmoniously punctuate the prevailing green, while their graceful, sinuous yielding to every wind gives animation to gardened landscapes too likely to look "fixed."

H. O. G. Arundinaria. Ribbon Grass. A very handsome variety of strong growth. Leaves striped longitudinally with green and cream color. Valuable for edging and very hardy. Each, 35c; doz., \$3.50.

Helenium Autumnale. Gives an endless profusion of yellow, panicked flowers. 5 feet. Each, 25c; doz., \$2.50.

Heliopsis Pitcheriana. Orange Sunflower. Pretty Daisy-like flowers, orange yellow, with a pyramidal center of darker shade. Each, 25c; doz., \$2.50.

Hemerocallis. Yellow Day Lily. Effective in clumps and masses, numerous panicles of orange and yellow lily-like flowers protruding high above the grass-like foliage.

H. Dumortieri. Dwarf and compact; 2 feet; flowers orange. Each, 25c.

H. Flava. LEMON LILY. Crowned by beautiful lemon-colored flowers 3 to 4 inches in diameter, and delightfully fragrant. 3 feet. Each, 25c.

H. Fulva. TAWNEY LILY. Tawney orange yellow; 3 feet. Each, 25c.

H. Kwanso. fl. pl. (Double Orange Lily.) Large, double, copper colored flowers. Each, 25c.

Heuchera Sanguinea. Alum Root. A clump of this very desirable plant when in full bloom dazzles the eye with its brilliant crimson spikes. 2 feet. Each, 35c.

Helianthus. Hardy Sunflower. Popular for summer cutting and massy display. See inside back cover. Each, 25c; doz., \$2.50.

Hibiscus Moscheutos. The fine old swamp Rose Mallow. Large purplish pink flower with large dark eye. 4 to 5 feet. Each, 25c.

H. Crimson Eye. Immense flowers of purest white, with large centers of velvety crimson. Each, 25c.

H. Militaris. HALBERT LEAVED ROSE MALLOW. Tall growing, delicate flesh pink, darker toward the center. Each, 25c.

Hollyhock. Indispensable plants, possessing a character peculiar to themselves which renders them especially valuable to break up any set effect in lawn planting, with their towering spikes of showy flowers. As usually treated, the Hollyhock is a biennial, but if planted in rich loam where the water will not settle around the crown in the winter they become very satisfactory perennials. See inside back cover. Assorted colors. Each, 25c; doz., \$2.50.



Delphinium.

H. Allegheny or Mammoth Fringed. Extra large flowers, in mixed colors. Finely curled and fringed. Each, 25c; doz., \$2.50.

Lathyrus Latifolius. Hardy Climbing Pea. Red, pink and white. Each, 25c.

Lily of the Valley. The exquisite white flowers and pale green foliage render this one of the most admired of plants. Succeeds in open ground in almost any situation, but prefers shade with plenty of moisture; once planted and established the crowns increase each year. Prepare the soil with a mixture of leaf-mold, sand and plenty of well rotted manure, which should be thoroughly incorporated with the soil two feet deep. Set the roots about two inches below the surface. No further attention is required. They are perfectly hardy and are not injured by frost. Flowering clumps, each by express at buyer's expense, 35c; doz., \$3.50, or postpaid, 50c, each. See illustration page 85.

Lobelia Cardinalis. Cardinal Flower. One of the showiest things in the garden. Intense cardinal-red flowers arranged in stocky spikes 15 to 18 inches long keep the plant



Hibiscus.

afire throughout August and September. Each, 25c; doz., \$2.50.

Lychnis Chalcedonica. Maltese Cross. Heart-lobed stars of brightest vermillion, arranged in large flat panicles, make this variety as showy as a Geranium, and an excellent cutting sort. Each, 20c; doz., \$2.00.

Lysimachia nummularia. Loose-Strife or Moneywort. A rapid growing plant of creeping tendency, soon covering the ground with a dense carpet of foliage, and is well adapted to use as a cover under trees and shrubs where grass does not readily grow. Deep yellow flowers. Each, 25c; doz., \$2.50.

Monarda Didyma. Bee Balm. 2 ft., 7-10. A showy plant which is indispensable for border and mass planting. Rich aromatic foliage and showy heads of brilliant scarlet flowers in profusion. Each, 25c; doz., \$2.50.

Myosotis. Forget-Me-Not. An always popular flower. Thrives in any rich, well-drained loam. Valuable for borders and beds. Each, 25c; doz., \$2.50.

Papaver. Poppy. These varieties are hardy and perennial. They are handsome both in flower and foliage. See illustration on page 81.

P. nudicaule. ICELAND POPPY 1 ft., 6-10. Flowers are a beautiful bright yellow, each on a long clean stem, very fine for cutting. The foliage is pretty and the constant succession of bloom makes it desirable as a border. One of the earliest to blossom. Each, 35c; doz., \$3.50.

P. orientalis. ORIENTAL POPPY. 12-18 in., 7. One of the very showiest flowers in the hardy class. The foliage is deeply cut and fern-like, and of a beautiful dark green. The flowers are extremely large and of a gorgeous, deep scarlet color, shaded to black at the center. They are borne on long stems and are beautiful flowers for the vase. Should be found in every collection. Each, 25c; doz., \$2.50.

Pinks—Hardy Garden. Without the spicy fragrance of the hardy pinks a garden is incomplete; and their perfect form and rich coloring make them great favorites for summer bouquets. Each, 20c; doz., \$2.00.

Book on Home Floriculture. By C. N. Page. Contains chapters on propagating plants, how to prepare hot beds and cold frames, lists of desirable plants for house or garden, ornamental vines, hardy shrubs, etc. 174 Pages. Price, 25c, postpaid.



Funkia subcordata. White Day Lily.

Superb Pæonies

Hardy as the Oak—Once Planted All Is Done—
Increasing In Size and Beauty With Age.

The Pæony is a native of Siberia which undoubtedly accounts for its great vigor and hardiness. The ideal flower for the great Northwest, since it endures the most intense cold without injury. During recent years it has been so vastly improved that now large acreages are devoted to growing cut flowers for market, so beautiful and highly prized are the blossoms.

Set the roots slanting 3 to 4 feet apart each way, with the topmost buds 4 inches below the surface. They will generously repay good care: keep the soil loose and free from weeds but use manure sparingly and only after the ground is frozen. A few handfuls of bone meal worked around the crowns will greatly encourage growth and improve the blooms. Pæonies do best in a sunny location and should be left undisturbed for years.

The varieties offered below include a complete range of form and color, no two alike, the very best and most desirable sorts.

They are for delivery from March to May but can also be supplied from September to November.

White and Light Shades.

Festiva Maxima. White, spotted carmine, immense...	Each 50c
Grandiflora Alba. Early white.....	30c
La Tulipe. Blush white, outer petals striped red.....	50c
Queen Victoria. Fine white, good cut flower.....	25c

Red and Crimson Shades.

Andre Lauries. Violet red, fragrant, late.....	25c
Baroness Rothschild. Very fine, purplish-lilac.....	25c
Francis Ortegat. Brilliant crimson, full double, rich.....	35c
La Sublime. Very fine, floriferous, crimson.....	35c
Marchal Vaillant. Large, deep red, very late.....	35c
Plutarch. Very fine, glistening crimson.....	50c
Richardson's Rubra Superba. Very fine, rich crimson.....	75c
Rubra Triumphans. Very large, bright crimson, early.....	35c

Pink and Rose Shades

Alexander Dumas. Fine lilac pink.....	35c
Duchess d'Orleans. Carmine pink.....	25c
Edulis Superba. Rose pink, very early, fragrant.....	30c
Floral Treasure. Bright light pink.....	50c
Grandiflora Rosea. Beautiful dark pink.....	35c
Humei. Immense, cinnamon centered, pink.....	25c
Lady Leonora Bramwell. Soft pink; very fine cut flower.....	35c
L'Esperence. Splendid, fragrant, early pink.....	30c
Madame Furtado. Beautiful deep pink.....	35c
Madame Lebon. Bright cherry pink, silvery reflex.....	50c
Pomponia. Blush pink, tall, vigorous.....	25c
Queen Victoria. Pink, very fine cut flower.....	25c
Victoria Tricolor. Rose, pink and salmon.....	25c

All the above prices are by express at purchaser's expense. If wanted by mail add 10c each for postage.

Pæonies for Hedge Rows and Massing.

By Express Only at Purchaser's Expense.	Dozen	100
Double White, unnamed... Each, 25c	\$2.50	\$15.00
Double Pink, unnamed... Each, 25c	2.50	15.00
Double Red, unnamed... Each, 25c	2.50	15.00
Double Rose, unnamed... Each, 25c	2.50	15.00

Six at dozen rate; 25 at 100 rate.

Pæony Collections.

Special Offer. One of each of the above 25 named varieties for \$8.00, by express at purchaser's expense. If wanted by mail add postage on 20 lbs. at rate on page 1.

Surprise Collection. One each of 12 choice varieties, our selection, for \$3.00, by express at purchaser's expense.

**PÆONY
L'ESPERENCE**

Pæonies officinalis.

The real old-fashioned Pæony of our grandmothers' days. These varieties bloom two weeks earlier than the sorts offered above. Strong growers with large, full, double flowers and very fragrant.

Anemoniflora rubra. Anemone shaped flowers of a beautiful brilliant red color. Each, 50c.
Atrorubra plena. Dark red, full flowers. Each, 35c.
Mutabilis. Light rose, changing to white. Each, 35c.
Rosea plena. Rose. Each, 35c.
Rosea superba. Beautiful, light rose. Each, 50c.
Tenuifolia. Single, dark red, cut leaved. Each, 30c.
Tenuifolia flore pleno. Dark red, double, cut leaved. Each, 40c.

If wanted by mail, add 10c each for postage.

Pæony Manual, by Harrison, 25c, postpaid.





Physostegia.

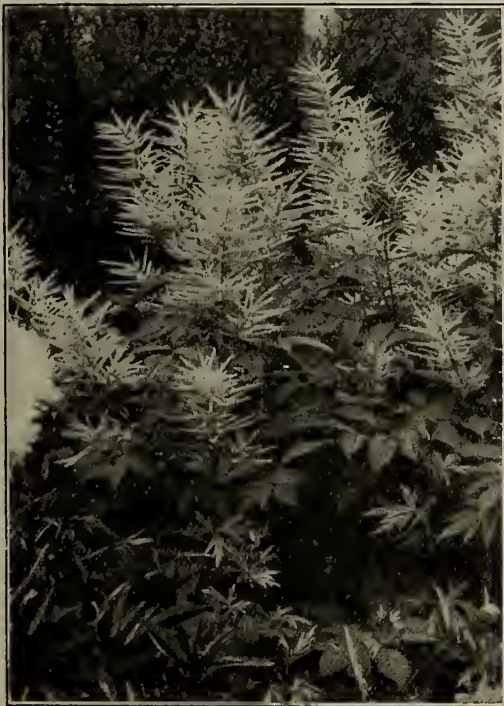
green pinnate foliage with branched panicles of creamy white flowers. Each, 30c; doz., \$3.00.
S. filipendula. Dropwort. 2-3 ft., 6-7. Dark green, fern-like foliage and dense heads of clear white flowers often tinged with rose. Each, 30c; doz., \$3.00.
S. Japonica. See illustration below. 2 ft., 6-7. A handsome variety with dark green foliage and showy spikes of white flowers. Each, 25c; doz., \$2.50.
S. Ulmaria. Double Meadow Sweet. 2-3 ft., 6-8. Handsome double white flowers. Each, 30c; doz., \$3.00.
S. Palmata. CRIMSON MEADOW SWEET. Stems and branches purple red. Flowers crimson. Each, 20c; doz., \$2.00.

Stokesia Cyanea. Stoke's Aster. One of the most charming hardy plants, freely blooming from July to October. Flowers of Centaurea shape, often measure four to five inches across, making a rich show of lavender-blue. 1½ to 2 feet. Each, 20c; doz., \$2.00.

Tritoma. Flame Flower. The flowers of these plants combine finished elegance with an aggressive conspicuity; their size, peculiar form and high coloring commanding attention from every viewpoint, while close inspection admits their refined beauty and utility—as cut flowers for interior decoration. Rush-like foliage supports smooth, thick flower stalks a yard long with a single fiery cone at the top.

T. Uvaria Grandiflora. Vivid orange-scarlet with orange base—commonly called "Redhot Poker" plant. Each, 25c; doz., \$2.50.

T. Pfitzeri. An improved type of more perfect form, and showing a marked predominance of scarlet, the opened lower petals merely, being rimmed with orange. Each, 25c., doz., \$2.50.



Spiraea Japonica.

Physostegia. False Dragon Head. Handsome midsummer flowering plants, 3 to 4 feet high; bearing broad, dense spikes of tubular flowers of delicate, but conspicuous beauty. Each, 20c; doz., \$2.00.
Platycodon Grandiflorum. Balloon Flower. Bloom constantly from July until late in September; flowers large, bell-shaped, of a deep shade of blue. An extremely rapid grower, doing well in any ordinary soil. Perfectly hardy, making a dense branching bush 2 to 3 feet high. See page 81 for illustration. Each, 20c; doz., \$2.00.

Pyrethrum Roseum. Foliage fine-cut and attractive; flowers borne profusely on long straight stems, colored in all shades of rose. A splendid cut flower and conspicuous in the garden. See inside back cover. Each, 20c; doz., \$2.00.

Ranunculus speciosus flore pleno. Double Buttercup. 18 in., 5-7. A showy border plant thriving in ordinary soils. Very double, deep, glossy, golden yellow flowers and handsomely cut foliage. Each, 30c; doz., \$3.25.

Rudbeckia "Golden Glow." The most prolific and satisfactory hardy perennial of all yellow flowering sorts. Grows 5 to 7 feet and blooms from early summer until frost. Flowers are produced on long stems in enormous quantities, and resemble golden-yellow Cactus Dahlias. Each, 15c; doz., \$1.50.

Sedum Spectabilis. Stone Crop. Of upright growth, 15 to 18 inches high. Foliage rounded, thick and rubbery, crowned with massive flat cymes of light rose-colored flowers. Each, 20c; doz., \$2.00.

Spiraea. (Herbaceous.) A valuable class of herbaceous plants. Should not be confused with the shrubby spiraeas.

S. aruncus. GOAT'S BEARD. 3-4 ft., 6-7. Light S. flowers. Each, 30c; doz., \$3.00.

S. japonica. See illustration below. 2 ft., 6-7. A handsome variety with dark green foliage and showy spikes of white flowers. Each, 25c; doz., \$2.50.

S. Ulmaria. DOUBLE MEADOW SWEET. 2-3 ft., 6-8. Handsome double white flowers. Each, 30c; doz., \$3.00.

S. Palmata. CRIMSON MEADOW SWEET. Stems and branches purple red. Flowers crimson. Each, 20c; doz., \$2.00.

Stokesia Cyanea. Stoke's Aster. One of the most charming hardy plants, freely blooming from July to October. Flowers of Centaurea shape, often measure four to five inches across, making a rich show of lavender-blue. 1½ to 2 feet. Each, 20c; doz., \$2.00.

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TRITOMA
PFITZERI

Lily of the Valley. See page 83.

Vinca minor. Periwinkle. Green Myrtle. 8 in., 6-7. A showy creeping plant with glossy evergreen foliage. Bright blue flowers borne freely in early spring and at intervals throughout the summer. Thrives in places too shady for grass and is thus valuable for many purposes. Each, 25c; doz., \$2.50.

Yucca Filamentosa. Adam's Needle. A hardy evergreen plant with long narrow leaves that are bright green the whole year. The flowers are creamy white, bell-shaped, produced on long spikes 3 to 4 feet high. Finestately lawn plant. Each, 25c; doz., \$2.50.

Hardy Perennial Collection.

The above varieties of Hardy Perennial Plants represent the very best sorts for northern growing, and were selected as being the most desirable for that purpose. All are hardy and should give very satisfactory results, season after season. We now offer a collection of twelve varieties, of our selection, all different, for \$2.50, by express at purchaser's expense. We cannot list the varieties as each collection may differ from the others and the date at which the order is received may also have something to do with what one may receive. Nevertheless each collection will prove of great interest and value to the purchaser and will be worth much more than is asked for it. One dozen perennial plants, 12 varieties, \$2.50.

Most Brilliant Perennials. Coreopsis, Delphiniums, Gaillardias, Hemerocallis, Helianthus, Hibiscus, Hollyhocks, Iris, Oriental Poppy, Paeonies, Phlox, Shasta Daisy and Tritoma.

Best Low Growing Perennials. Especially suited for cemetery use. Clematis Crispa, Perennial Sweet Pea, (Lathyrus latifolius), Lily of the Valley, Hardy Garden Pinks, Sedum, Vinca, Coreopsis, Gaillardia and Artemisia.

Special Offers From Cover Page Selections.

Gladioli.

The collections offered on the inside front cover page embrace some of the very finest new varieties. This is a splendid opportunity to make a start with Gladioli or to improve your present assortment. They will surprise you with their rare beauty.

One of each of the 12 Superb Named Gladioli, \$1.25, prepaid.

Six of each of the 12 Superb Named Gladioli, \$6.50, prepaid.

Our 1915 Introductory Offer. A special mixture with a complete range of color. Doz., 45c; 100, \$3.00; 1000, \$25.00; by express at purchaser's expense. If wanted by mail, add 10c per doz. for postage.

Hardy

Garden Plants.

The plants offered on the inside back cover page have all been especially selected for their hardiness, beauty and great usefulness. Why not start now to permanently improve your garden by using some of these plants which keep blooming year after year? Grandmother's Collection includes the beautiful Canterbury Bells, showy Shasta Daisy, free-flowering Coreopsis, lovely Larkspur, brilliant Gaillardia and stately Hollyhock.

Grandmother's Collection of Six Hardy Garden Plants, by express at purchaser's expense, \$1.25, or sent prepaid for \$1.75.

Hardy Phlox

The Phlox illustrated on the back cover page give merely a suggestion of the striking effect which their blossoms produce. They are among the easiest of hardy plants to grow. Everyone succeeds with them. Plant varieties of Phlox which bloom at different periods and they will furnish your border with fine masses of color most of the summer. Several plants of one variety should be massed together for best effect. They are also excellent for cutting. See page 86 for complete list of varieties.

Strong roots, each, 25c postpaid. By express at purchaser's expense, each, 20c; dozen, \$2.00.



Note the elegant, ornamental effect of the New Hydrangeas in tubs.

New Hydrangeas for Pot and Tub Culture.

These beautiful Hydrangeas in lovely shades of pink and white are not hardly like the common ones but make splendid subjects for porch and lawn decoration when grown in pots, vases or tubs. They are also very satisfactory in the window garden where their glossy foliage is attractive even when the plant is not in bloom.

They require rich loam soil, liberal watering and occasional application of bone meal or garden fertilizer. Before applying remove an inch of surface loam, sprinkle a dessert-spoonful of bone meal on the earth below and replace top soil.

In some soils these varieties naturally flower blue. Producing this color artificially is sometimes difficult, owing to the natural chemicals in the water etc. Sometimes steel filings are used for this purpose, or one-half pound of alum broken into small pieces and mixed with each bushel of soil.

Give the plants full exposure to the sun except when in flower, at which time slight shade will prolong their blooming period.

On the approach of freezing weather the plants should be gradually allowed to become dormant and dry off.

Remove them to a light cool cellar or similar place protected from frost, but cool enough so that new growth does not start. Water just enough to

keep roots from drying up. Early in the spring bring them to a sheltered porch and increase the supply of water, again giving full exposure as the weather becomes settled. If it is desired to winter them in the window garden continue to water them freely so as to keep up the growth.

For hardy Hydrangeas see page 94.

We recommend shipment by express—purchaser to pay charges.

Avalanche. Large pure white, fine form, very free flowering. Each, 50c.

Fraicheur. A delicate shade of rosy-white. Each, 50c.

Hortensia Standards. Trained to a tree-like form with a single stem 12 to 15 inches high. Pinkish-white. Each, \$1.00.

Japonica. A popular Japanese variety with gorgeous flowers of a deep rose shade. Each, 50c.

La Lorraine. Very large crimped flowers, first pale then changing to deep pink. Each, 50c.

Lillie Mouilliere. One of the latest introductions. Deep pink. Each, 75c.

Mlle. Renee Gaillard. Large panicles of milky white, irregularly dentated flowers, especially good for growing indoors. Each, 50c.

Otaksa. The variety so extensively used for summer porch decoration, producing immense pink flower heads throughout the summer. Each, 50c.

Hardy Perennial Phlox.

We have attempted to illustrate on this catalogue cover a few heads of Phlox, but unfortunately, small pictures can do but scant justice to such a subject. With this flower it is not the single blossom which shows to best advantage but the whole mass, producing a blaze of color which stands out strikingly against a dark background of shrub or vine.

The very name—"Phlox" means flame. What could be more appropriate?

This plant is a native of North America and that is doubtless why it does so well here. Everyone succeeds with it and whoever likes cut flowers appreciates the many showy heads borne on long stiff stems.

Like most perennials, the Phlox plants grow bigger year after year. As the plants become stronger the blossoms increase in number and size, reaching their highest development about the third or fourth year.

On this account they require liberal "feeding" and do much better when well composted manure is forked in around the base each fall, and bone meal in the spring. After 4 or 5 years the clump is likely to become root-bound so it is well to divide each one, having several eyes or growing shoots on each division. The outside root-shoots should have extra good care since they will produce the best plants.

As soon as the plants are received from the nursery dip each one in a pail of liquid mud. Then plant 9 inches apart in deeply trenched, well enriched soil, being careful to spread out the roots and firm the earth so it will take a hard pull to uproot them. Lastly, use compost or other mulch around the crown to preserve soil moisture. A fairly open situation suits Phlox best, too much shade stunts growth, too much sun fades out the richer colors. Liberal watering every evening during the blooming period improves the blossoms. These should be removed as soon as they wilt to prolong the flowering season.

For winter protection, as soon as the ground freezes hard, lay on crowns an evergreen branch with several inches of leaves or straw loosely piled on top. About the middle of March remove one-half this litter and loosen up the rest—removing it gradually as the sun becomes warmer. Water or ice

remaining on the plant crowns for any length of time is sure to destroy them.

In our list of Phlox we offer the very best varieties, ranging in color from white or lilac gray to fiery reds and deep purple. Many show combinations and lovely shades unknown in any other flowers. All bloom between July and September. For best effect, mass each color separately.

Our Special Offer. Strong one year old roots, each, 20c; doz., \$2.00; 100, \$14.00; by express at purchaser's expense. If wanted by mail add at the rate of 5c each for postage.

Superb Collection. One of each of the 12 choice varieties, for \$2.50, postpaid. Any six varieties, purchaser's selection, \$1.25, postpaid.

B. Comte. Medium. Brilliant French purple with crimson-carmine shadings. The finest dark colored Phlox grown today.

Coquelicot. Dwarf. A fine scarlet with crimson-red eye.

Elizabeth Campbell. Dwarf. New. Bright salmon-pink, with lighter shadings and dark red eye. One of the handsomest varieties which is attracting attention everywhere.

Europa. Tall. A white variety, with very decided crimson-carmine eye; the individual flower as well as the trusses are very large, entirely distinct; of remarkably sturdy, erect habit.

Henry Murger. Tall. Beautiful variety; white, crimson-carmine center.

Mme. Paul Dutrie. Medium. A delicate lilac rose, reminding one of some of the beautiful soft pink orchids. The flowers are very large and borne in panicles of immense size.

Mrs. Jenkins. Tall. The best tall, early white for massing.

R. P. Struthers. Tall, rosy carmine with claret-red eye; fine.

Rynstrom. Tall. Deep salmon-rose, not unlike Paul Neyron Rose, very fine for massing.

Selma. Tall. Large flower, pale rose mauve with claret-red eye.

Siebold. Tall. Vermilion-red, overlaid with orange-scarlet; crimson-red eye.

Widar. Medium. A light reddish violet, with very large white center which intensifies and illuminates the color.

HARDY IRIS

Iris means "rainbow" and truly this plant brings the same dainty radiance into the garden that the rainbow does to a dull, cloudy sky. They are of easy culture and usually bloom freely. As cut flowers they are very decorative, they last well and nearly every bud opens perfectly in water. The first to bloom is the dwarf *Pumila*, then come the German and lastly the Japanese and Siberian varieties. The Japanese and Siberian differ from the earlier sorts in showing fewer flowers at once, but have a longer blooming period. The Japanese are the most gorgeous of all.

Iris *Pumila*.

Very pretty, dwarf variety of German Iris, growing about 8 inches high, very free blooming, sweet scented. These bloom about two weeks before the German Iris. Useful for edging. Lilac-purple flowers. Each, 15c; doz., \$1.50, postpaid at single prices.

German Iris

The German Iris or *Fleur-de-Lis* are among the most desirable, hardiest and easiest grown of our spring-flowering plants. To this class belong the old-fashioned "flags" which have been so much improved in recent years that one can hardly recognize the older forms of the parents in some of the beautiful, newer varieties. These modern sorts often rival the orchid in delicacy and richness of coloring. They are the freest blooming of the Iris family. Splendid for beds, borders or in front of shrubbery but always most effective in masses of separate colors. Plant in a dry, sunny location setting the roots quite shallow. We advise planting in April. Each, 15c; doz., \$1.50.

Our special offer, one of each variety for \$1.50. Six for 75c, by express at purchaser's expense. If by mail, add 3 cents each for postage.

S. standards. F. falls.

Aurea. Pure gold.

Candida. S. Pale lavender. F. veined white.

Delicata. Pale lavender, traced with other colors.

Flavescens. Creamy white.

Florentina alba. Early white. This has the iris root of commerce. Fragrant, fine for cutting.

Florentina. Blue. One of the old favorites.

Madam Chereau. Very fine, strong stem; flowers white, frilled, with clear blue border.

Marmora. S. Smoky lavender. F. violet, richly veined.

Pallida Speciosa. S. Dark lavender, shaded lighter. F. Light purple.

Queen of May. Rosy lilac, almost pink, fine.

Sans Souci. Yellow, elegantly veined.

Stenophyllia. S. Lilac. F. violet, very fragrant.



German Iris.



Japanese Iris.

Japanese Iris (*Kaempferi*.)

A bed of these Iris once established is a "joy forever," the enormous flowers often ten inches across are strong growers and make a striking display. They begin to bloom in June and continue many weeks. All of them are beautiful. They thrive best in a moist situation, but if planted in ordinary garden soil should be frequently watered in dry weather. They should have a partially shaded location, protected from the strong mid-day sun, for example on the north or west side of the house.

- No. 3. **Kumo-no-obi**, lavender, shaded white, very full centre.
- No. 5. **Kyodaisan**, dark purple, with light centre, very double.
- No. 14. **Hana-aoi**, pale lavender, dark stripes, purple centre, 6 petals.
- No. 15. **Ugi-no-sato**, rare shade of French gray, bronze centre.
- No. 16. **Okubauri**, white with blue stripes, centre purplish.
- No. 19. **Gosetsu-no-mai**, violet blue, veined white, with double centre.
- No. 20. **Shirataki**, white with gold centre, 6 wavy petals.
- No. 21. **Kuma-funjiu**, dark purple, ruffled petals, double centre.
- No. 22. **Datedogu**, deep rose, shaded white centre, 3 petals.
- No. 23. **Sofu-no-koi**, lavender, white and gold centre.
- No. 24. **Kurokumo**, rich bluish purple, gold centre.
- No. 25. **Idzumigawa**, white, shaded lavender, delicate blue veins.

In ordering please give numbers of varieties wanted.

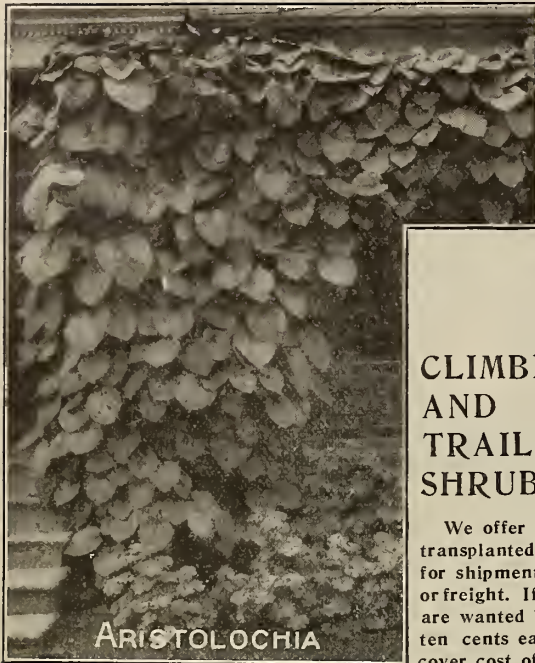
Price, large clumps as imported, each, 50c, postpaid; by express at buyer's expense, each, 35c; doz., \$3.50.

One each of the above 12 varieties for \$3.50 by express at buyer's expense. Six for \$1.75.

Siberian Iris.

Siberian Blue Iris. A flower of remarkable hardiness, intense clear blue, blending richly with other colors. Each, 15c; doz., \$1.50, postpaid at single prices.

Iris *Siberica Orientalis*—"Yale Blue." Strong, free-growing, adapting itself to almost any location. It produces a mass of deep blue flowers from June to August. Each, 15c; doz., \$1.50; postpaid at single prices.



ARISTOLOCHIA

CLIMBING AND TRAILING SHRUBS.

We offer two-year-old transplanted stock only for shipment by express or freight. If single plants are wanted by mail, add ten cents each, extra, to cover cost of mailing.

Ampelopsis. Woodbine.

A. quinquefolia. COMMON WOODBINE OR VIRGINIA CREEPER. A very rapid climber. Each, 35c; 10, \$3.00.

A. quinquefolia var. *Engelmanii*. ENGELMAN'S WOODBINE. Clinging tendrils and shorter joints than *quinquefolia* which gives it better ability to climb and cling. Adapted to this climate. Each, 40c; 10, \$3.50.

Aristolochia Siphon. DUTCHMAN'S PIPE. Flowers resemble old-fashioned Dutch pipes. One of the most rapid climbers in use, and very desirable for shade or screen purposes. Does best where the full force of the noonday sun does not strike it, its foliage is damaged by too much heat. Each, 75c.

Celastrus scandens. BITTER SWEET. Handsome, glossy green foliage with large clusters of orange crimson fruits in the fall. Each, 35c; 10, \$3.00.

Cinnamon Vine. A beautiful climbing vine, which will quickly surround an arbor, window or veranda with a profusion of vines covered with handsome, glossy, heart-shaped leaves, bearing great numbers of delicate white blossoms, which emit a delicious cinnamon fragrance. We know of no vine that is more satisfactory, thriving everywhere, and when once planted will grow for many years and be a source of constant delight. Each, 5c; 3 bulbs for 15c; 6 for 25c, postpaid. Mammoth size, 25c each, postpaid.

Clematis.

C. Coccinea. Bright vermilion, bell-shaped flowers with yellow center. Each, 35c.

C. Duchess of Edinburgh. Very fine, pure double white. An excellent companion for *C. Jackmanii*. Each, 50c.

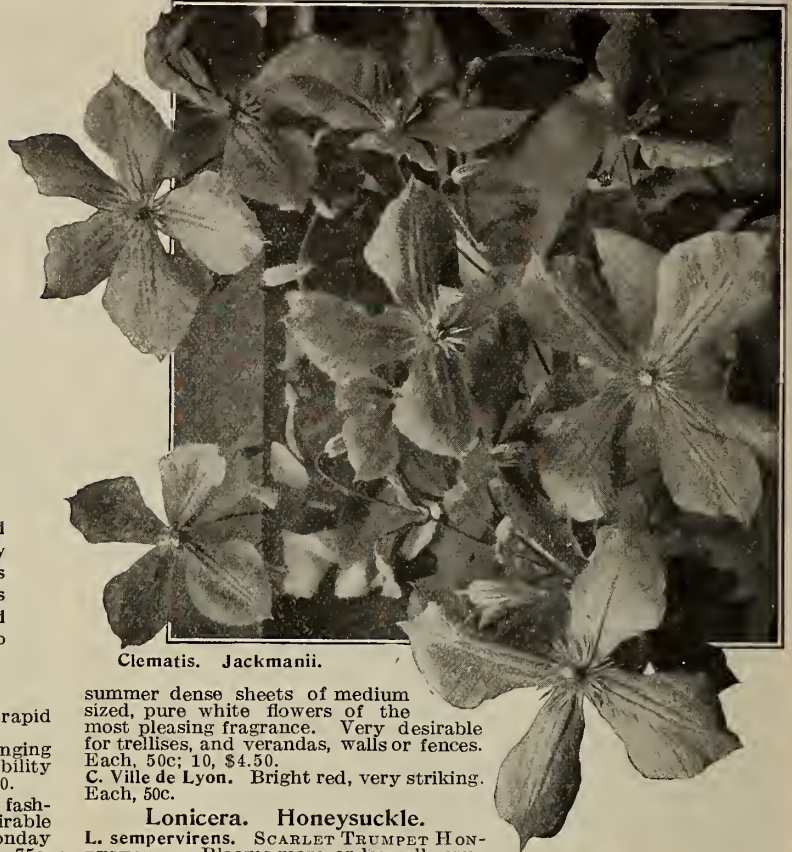
C. Henryi. Vigorous and free bloomer, producing large, pure white flowers during summer and early autumn. Each, 50c.

C. Jackmanii. Flowers are four to six inches in diameter, violet, purple, distinctly veined. Each, 50c.

C. La France. Very dark purple, flowers of the largest size. Each, 50c.

C. Madame Edouard Andre. Flowers large, of a beautiful bright velvety red, very free flowering. Each, 40c.

C. paniculata. JAPANESE CLEMATIS. One of the finest hardy climbers with handsome foliage, extremely vigorous, rapid growth. Produces in late



Clematis. Jackmanii.

summer dense sheets of medium sized, pure white flowers of the most pleasing fragrance. Very desirable for trellises, and verandas, walls or fences. Each, 50c; 10, \$4.50.
C. Ville de Lyon. Bright red, very striking. Each, 50c.

Lonicera. Honeysuckle.

L. sempervirens. SCARLET TRUMPET HONEYSUCKLE. Blooms more or less all summer. Long, deep crimson flowers borne profusely in clusters. The flowers are followed by ornamental scarlet berries. Each, 40c; 10, \$3.50.

L. flava. MINNESOTA HONEYSUCKLE. A rare form with broad, glaucous foliage; flowers followed by orange-scarlet fruit. Each, 40c; 10, \$3.50.

Lycium chinensis. MATRIMONY VINE. Rapid, dense growing climber. Pink and purple flowers, followed by brilliant, crimson berries. Berries are poisonous. Vines should be used on walls, etc., so as to hang out of children's reach. Especially desirable for the Northwest. Each, 35c; 10, \$3.00.

Madeira Vine. A rapid and dense growing climber twining to a great height. Bears fleshy, heart shaped, light green leaves and long stems of fragrant, white flowers. Each, 5c; doz., 50c.

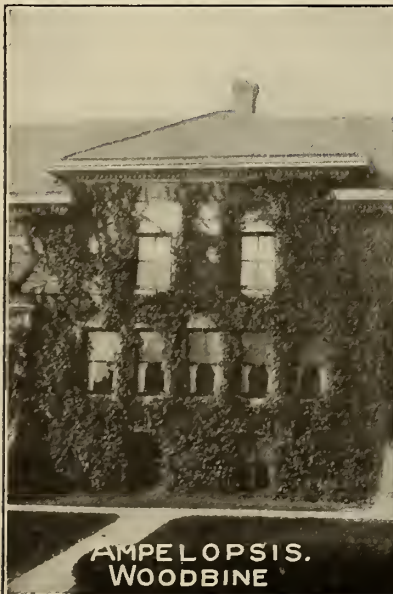
Vitis riparia var. *Beta*. BETA GRAPE. A hybrid of the wild grape. The fruit is much larger than the wild grape and of a very much better quality. Especially fine for wine, jellies, etc. Each, 50c; 10, \$4.50.

Wistaria. The *Wistaria* is particularly valuable wherever tall-growing climbers are wanted. The flowers are borne in long pendulous clusters.

Chinese Purple. Lovely, rich violet-purple; deliciously scented and handsome. Large plants by express, 75c, each.

Chinese White. Similar to the purple variety but with pure white flowers. Large plants by express, 75c, each.

Wistaria frutescens. AMERICAN SHRUBBERY WISTARIA. A fine trailing shrub and valuable in ornamental work. Flowers are a pale blue and borne in short clusters; fragrant. A free bloomer. Each, 50c; 10, \$4.50.

AMPELOPSIS.
WOODBINE

MATRIMONY VINE

CLEMATIS
PANICULATA

ROSES.

DWARF HARDY HYBRID PERPETUALS.

We offer strong, two-year old field grown plants, which under ordinary conditions should produce satisfactory flowering results the first season. Each, 40c; doz., \$4.00; 100, \$30.00. One of each of the twenty-one favorites for \$6.25. By express only.

Anna de Diesbach. Clear, bright carmine-pink, very large, full and finely shaped; fragrant and a free bloomer.

American Beauty. Rich red, passing to crimson, very delicately veined and shaded and surpassingly fragrant.

Baron de Bonstetten. Velvety blackish crimson; very large, double, fragrant flowers.

Baroness Rothschild. Pale, satiny-rose; very large.

Black Prince. Deep blackish crimson, large full and globular, very hardy and free flowering.

Frau Karl Druschki. The ideal hardy white rose, pure in color, perfect in form; strong grower and remarkably free-flowering; a superb variety.

General Jacqueminot. Brilliant scarlet-crimson; an old favorite and one of the best.

Gloire Lyonnaise. White, tinted with yellow; large, full and of good shape; very distinct and pleasing.

Gruss an Teplitz. Four to five feet high; vivid, dazzling, fiery crimson; sweetly fragrant; long stems.

J. B. Clarke. Intense scarlet, shaded crimson-maroon, very dark and rich; fragrant; petals large, deep and smooth; growth strong and upright.

Jonkheer Mock. A robust, free grower, bearing glorious flowers in two color tones, fiery-red within and silvery-white without.

Jules Margottin. Glossy pink, a very beautiful rose.

La France. Silvery-rose with pink shades and satin-like petals of great beauty. Large, symmetrical, deliciously fragrant blooms from June till frost.

Magna Charta. Bright pink, suffused with carmine; a beautiful rose; strong, vigorous grower.

Mrs. R. G. Sharman Crawford. Deep rosy-pink, outer petals shaded with pale flesh.

Mrs. John Laing. Soft pink, of beautiful form; exceedingly fragrant and remarkably free-flowering.

Paul Neyron. Dark rose; of enormous size.

Paul Kruger. Beautiful pink, full and showy.

Persian Yellow. Deep yellow, large and full.

Prince Camille de Rohan. Deep velvety crimson maroon, shaded scarlet; a magnificent dark rose.

Ulrich Brunner. Bright cherry-red; flowers large and full; a good strong grower and always does well. See prices above.

HYBRID TEA ROSES.

Semi-hardy, require protection during the winter in this latitude. Strong two-year-old field grown stock. Each, 35c; doz., \$3.50.

One of each of six varieties for \$1.75.

Clothilde Soupert. A fine variety for bedding or pot culture; medium size and very double; white shading to deep pink at center; a profuse bloomer and strong grower; fragrant.

Etoile de France. A brilliant shade of clear red-crimson velvet, centering to vivid cerise; large flowers on long, stiff stems, vigorous, free blooming.

Killarney. Brilliant sparkling pink with large, pointed buds, broad, wax-like petals and enormous semi-full flowers of exceeding beauty.

Papa Gontier. Dark crimson, passing to glowing crimson; large buds and deep, open, semi-double flowers. A constant bloomer and vigorous grower.

Richmond. Scarlet-crimson of a most brilliant hue; long pointed buds and striking flowers on tall, erect stems; a rapid grower and constant producer.

White Killarney. A pure white, produced from the pink Killarney.



Frau Karl Druschki Rose.

HARDY CLIMBING OR PILLAR ROSES.

The following varieties are very desirable for training over arbors, trellises and verandas; also valuable as screens for unsightly objects, as old buildings, fences, walls, etc. All of the rambler roses are strong, vigorous, are perfectly hardy.

Extra strong two-year old stock; each, 50c; 10, \$4.50; by express only at buyer's expense.

Baltimore Belle. Pale blush, variegated carmine, rose and white; flowers in beautiful clusters, the whole plant appearing a perfect mass of bloom.

Crimson Rambler. Since the introduction of this wonderful variety, climbing roses have gained in popularity every season. This variety commands the admiration of all, by its gorgeous flowers; each cluster a bouquet in itself.

Dorothy Perkins. A beautiful companion to the Crimson Rambler; color, a handsome shell-pink, which holds a long time without fading. The flowers are borne in clusters of from ten to thirty and are very double. The buds are also remarkably beautiful. Very hardy and vigorous with deep green foliage.

Debutante. Light pink, passing to white; double blooms in clusters, with delicate perfume; dark, glossy foliage.

Hiawatha. Glowing ruby-crimson, with a clear white eye; single flowers in clusters; light glossy-green foliage.

Lady Gay. Cherry-pink, fading to soft white. The flowers, in large, loose trusses, together with the bud and foliage, form a mass of beauty from base of vine to tips of branches. See illustration on page 90.

Minnehaha. Similar to Dorothy Perkins, but paler in color.

Prairie Queen. Bright, rosy red frequented with white stripes. Foliage large and quite deeply serrated. Blooms in clusters; one of the finest.

Sweetheart. Buds of bright pink, shading to a soft white in the full blooms; very double and fragrant.

Veilchenblau. Produces immense panicles of blooms, opening reddish-lilac, changing to amethyst and steel-blue. Recently introduced from Germany. The nearest approach to a blue Rose.

Wedding Bells. White with soft pink.

Wichuriana. A low-trailing species suitable for covering porches or rough ground; producing single flowers in profusion after the June roses are past. The stems creep on the earth almost as close as Ivy. A distinct and valuable variety from Japan. Pure white.

Wichuriana Rubra. Same as above except flowers are bright red tinted orange-red.

All roses, 6 at dozen rate; 25 at 100 rate.

Pruning and Planting.

We advise pruning Roses early in the Spring. Pruning should be done while the plants are dormant, and before the sap begins to flow. The chief reasons for pruning are the formation of a symmetrical plant and to encourage the formation of bloom buds. Plants of delicate habit and weak growth require severe pruning; plants of vigorous growth should have the shoots only moderately shortened, but the branches well thinned out. If strong growing plants are closely pruned, a great growth follows with very few flowers. Dwarf Hardy Hybrid Perpetual Roses should have a second pruning in order to promote the formation of flower buds later in the season.

We consider the month of April and early May the best and safest season to plant in all the Northwestern States.



Killarney Rose.

ROSES

HARDY MOSS ROSES.

Price, Each, 40c; doz., \$4.00. By express at purchaser's expense.

Strong, vigorous and perfectly hardy. Prefer rich ground.

Blanche Moreau. Flowers are produced in clusters, and are large, full and sweet; color is pure white, both flowers and buds have an abundance of lovely deep green moss.

Crested. Pink, finely crested, very distinct from all others.

Eugene Verdier. Red. Very beautiful and attractive.

Madame Moreau. Red. A desirable variety.

William Lobb. Carmine, bright. Deserves a place in your garden.

HARDY SUMMER ROSES.

Austrian Copper. Single flower, brilliant coppery red. Each, 50c.

Harrison's Yellow. Strong, vigorous and hardy. Golden yellow, semi-double. Each, 50c.

Madame Plantier. Pure white, large and double; a free and continuous bloomer. Used extensively for cemetery planting. Each, 35c.

Persian Yellow. An old favorite, very free flowering, deep golden yellow, semi-double. Each, 35c.

Rosa Rugosa Rubra. A valuable hardy rose, forming vigorous bushes four to six feet in height. Thrives everywhere and blossoms throughout the summer. Attractive in autumn and early winter by its large, brilliant red seed pods. Flowers, rosy crimson. Each, 35c.

Rosa Rugosa Alba. Same as above except flowers are pure white. Each, 35c.

MONTHLY ROSES.

Not hardy outdoors in the North. Suitable for pot culture.

Each, 35c; doz., \$3.50; by express at purchaser's expense.

Cramoisi Superieur. Two-year-old strong roots. Deep red.

Ducher. Pure white. Long bud of good form and very vigorous.

Felleberg. Rose. Strong grower.

Hermosa. Cup-shaped, finely formed and full flowers of soft, deep pink, everblooming and beautiful.

Parsons on the Rose. By S. B. Parsons. Propagation, culture, classification and description. Price, \$1.00, (postpaid, \$1.10).

Paeony Manual. By C. S. Harrison. Price, 25c, postpaid.

Our Roses are ready in April. Please send your orders early.



Lady Gay Rose. See Page 89.

BABY RAMBLER ROSES.

This charming class of Roses is the sensation of the last few years. They represent the triumph of productive effort among Rose growers in bringing the vivid colors, prodigal freedom and beautiful clustering form of the grand outdoor Rambler Roses into the house for winter decoration.

Baby Rambler (Madame Norbert Levavaskeur). The Crimson Rambler in dwarf form, with the same clear, brilliant, ruby-red color. Hardy and healthy everywhere, attaining a height of twenty inches, and blooming in profuse clusters until frost, and throughout the winter if taken indoors. Each, 35c; doz., \$3.50.

Baby Dorothy (Maman Levavaskeur). A prolific producer of pure pink flowers, with all the good qualities of Crimson Baby Rambler. Each, 35c.

Jessie. A clear, glowing red. Of vigorous, erect growth and very free flowering. Each, 50c.

Katharina Zeimet. Pure snow-white double blooms in profuse clusters, making a sheet of white color. A compact, bushy grower of dwarf habit; foliage dark, glossy and finely cut. Each, 35c.

Mrs. W. H. Cutbush. A new baby rose of an entirely distinct color, light pink. The flowers are borne in huge trusses throughout the entire summer and autumn and completely cover the entire plant. Each, 35c.

Baby Rambler Tree Rose. Grafted on 12 to 18 inch stems. Very desirable for pot culture on porches or pillars. Each, 50c.

SOIL AND FERTILIZER FOR ROSES.

Best results are obtained when roses are planted where they will have full sunlight; even in a slightly shaded place they never do so well. Prepare the soil to a depth of at least a foot, and thoroughly mix with not less than two inches of well-rotted stable manure; or if unobtainable, bone meal should be put on at the rate of 10 lbs. to every 100 square feet of surface; this should be thoroughly mixed in the soil to the depth of the bed.

Fertilizers for Roses on pages 154 and 155.

INSECTS AFFECTING ROSES.

Green Fly. (Aphis). Colonies of these attack the young growth and suck the juice of the plant. Spray with tobacco solution or dust with tobacco powder after wetting the plants. Nico-Fume Liquid is especially effective.

Rose Slug. A light green worm that eats the leaves. Apply whale-oil soap, 1 lb. dissolved in 8 gallons of water; Paris Green, 1 oz. to 10 gallons of water or arsenate of lead.

Mildew. This grayish-white film on the affected leaves can be controlled by spraying with Bordeaux Mixture, 1 pint in 6 to 8 gallons of water.

Insecticides for Roses on page 149.



BABY
RAMBLER
ROSE

Northrup, King & Co.'s Fruit Trees.



Wealthy Apple.

SELECT APPLE TREES.

All our fruit trees have been especially selected for their hardiness and the varieties listed below are recommended for general planting in the Northwest. They are all northern grown, well rooted and with well balanced tops. Price, three years old, 11-16 inch and up, five to six feet, each, 35c; 10, \$2.50; 100, \$20.00. Four to five feet, 9-16 to 11-16 inch, each, 25c; 10, \$2.00; 100, \$18.00. Three to four feet branched, 7-16 to 9-16 inch, each, 15c; 10, \$1.25; 100, \$10.00. 25 at 100 rate.

Autumn Apples.

Duchess. Large, streaked red and yellow, great cooking favorite, tender and juicy. August and September. Very hardy.
Hibernal. Fruit large, greenish-yellow and bronze-red; flesh acid, juicy and good for cooking. November and December.
Fetofski. One of the earliest. Fruit small to medium; light yellow, striped and splashed red. Fruit tender and juicy.
University. Fruit large, clear yellow; flesh white and of good quality. November and December.
Okabena. Very popular; fruit medium, yellow-striped and splashed with carmine; quality excellent, crisp and juicy. September to November.
Maple. Sweet.

Winter Apples.

Anisim. Fruit medium greenish with dark red, sub-acid. Season, November to January.
Jonathan. Medium, red, extra quality. Fine dessert sort. Winter.
Malinda. Fine keeper. Season February to March; fruit medium; green with blush; flesh hard.
McIntosh. Medium, deep crimson, highest quality, juicy, sub-acid. Winter. Fine dessert variety, spicy odor.
Northwestern Greening. Large, green becoming yellowish-green. One of the best. December to March.
Patten's Greening. Large, green and blush; flesh yellowish-white, pleasant acid flavor. November to January.
Wealthy. Splendid dessert and cooking apple. Season October to March. Fruit medium, skin smooth, mostly covered with dark red. Flesh white, very juicy and of delicious aroma.
Wolf River. One of the largest grown in the North. Season October to January. Very handsome and showy.

CULTURE. Apple trees should be planted 30 feet apart and plums 18 feet apart.

As soon as the trees are received, unpack them immediately, shaking out all packing; if possible plant at once. If the trees have been delayed in shipment and become shriveled, bury them in moist earth and pour on water, keeping them wet for a few days. When they become plump and fresh, they are ready to plant.

Heeling In. If ground is not ready to plant, when trees arrive, unpack and heel in carefully, in loose, well drained soil, firming it well around the roots.

Pruning Tops. For 5 to 6 foot trees with a 3 to 5 foot stem, prune the branches back to within 3 or 4 buds of their base. Cut off all bruised or broken branches.

Preparing Land. It is best to plow under a heavy coat of manure the fall before planting. Then the ground should be disced and fitted as for any farm crop. If the ground needs enriching in the spring it is best to use well rotted manure as a surface mulch only, after the tree is planted.

Pruning Roots. This is essential. Trim off the broken and bruised ends. Cut any long slender roots back to about 8 inches. Make a slanting cut with a sharp knife, cutting from the under side.

Setting the Trees. Dig holes large enough to receive the roots easily, without crowding or bending. Keep the top soil separate from the bottom soil. Hold the tree in position, firming the dirt thrown into the hole. Plant the tree an inch deeper than it stood in the nursery. Shovel in the top soil first and keep working it under and around the crown and roots. Leave no air spaces. Tramp and pound the soil hard until the hole is three-quarters full. Then pour in several gallons of water. Let it sink in and fill up hole with loose dirt, but do not pack down after watering. This top soil will serve as a mulch to prevent evaporation.

Spraying. Use Arsenate of Lead to kill worms and leaf eating insects; Bordeaux Mixture for scab and fungous diseases. Use some form of tobacco extract for aphids. See page 149.

CRAB and HYBRID APPLE TREES.

Prices same as for Apples.

Florence. Light yellow, streaked with red. A splendid large variety.

Hyslop. Deep crimson. October to December.

Minnesota. Excellent sort for northern growing.

Orange. Hardy, productive, fine quality.

Transcendent. Immensely productive, the skin is yellow, striped with red.

Whitney. A heavy bearer. Season August and September. Fruit large, yellow and red; flesh yellow, rich and sweet.

CHOICE PLUMS.

Price, three years old, five to six feet, 11-16 inch and up, each, 75c; 10, \$6.00; 100, \$45.00. Four to five feet, 9-16 to 11-16 inch, each, 50c; 10, \$4.00; 100, \$30.00. Three to four feet, 6-16 to 9-16 inch, each, 40c; 10, \$3.25; 100, \$25.00.

Cheney. Early; dark red with blue bloom.

De Soto. Unsurpassed for quality and productiveness. Season medium; fruit orange overlaid with crimson.

Hawkeye. One of the largest and best; color dull red over yellow.

Ocheda. Medium size; color dull mottled red. Sweet and rich.

Surprise. Fruit large; color bright red; quality extra good; season medium.

Weaver. Free stone. Fruit large, oval; color orange overlaid with red.

COMPASS CHERRY-PLUM.

Price, three years old, four to five feet, 9-16 to 11-16 inch, each, 50c; 10, \$4.00; three to four feet branched, each, 40c; 10, \$3.00.

This famous hybrid does not diminish in its popularity as a hardy fruit tree for the extreme north. It was originated in Minnesota and is a cross between the sand cherry and a plum. The fruit is nearly an inch in diameter, a bright red, sweet and juicy and of very fine flavor. The tree is a regular and heavy bearer.

HANSEN HYBRID PLUMS.

Sapa. A cross between the Sand Cherry and a purple fleshed Japanese plum. Originated by Prof. Hansen of the South Dakota Experiment Station. The fruit has the rich dark purple flesh of the Japanese plum and the hardiness and prolificness of the Sand Cherry. Plums are nearly as large as California fruit, quality as good and hardier. Trees are very prolific. Price, four to five feet, each, 50c; 10, \$4.00; three to four feet, each, 40c; 10, \$3.00.

Opata. A cross between the Sand Cherry and a hybrid Japanese Plum. Very vigorous and hardy. Fruit measures over an inch in diameter. Sweet and of delicious quality. Skin thin, pit small, season early, color dark purplish red with blue bloom, flesh green. Prices same as for Sapa Plum.

Minnesota Agricultural Experiment Station

OFFICE OF STATE ENTOMOLOGIST

No. 18.

St. Anthony Park, Sept. 28, 1914.

Special Certificate of Nursery Inspection

THIS IS TO CERTIFY THAT in accordance with Sec. 7, Chapter 206, Session Laws of 1913, the nursery stock now offered for sale by Northrup, King & Co., Minneapolis, Minn., consists of stock purchased in Minnesota from a duly inspected nursery, as attested by affidavit filed in this office Sept. 28, 1914, by the above firm and that this stock has been found apparently free from dangerously injurious insects and contagious plant diseases. This certificate also covers foreign stock imported by the above firm and inspected in Minnesota by a duly authorized inspector from this office.

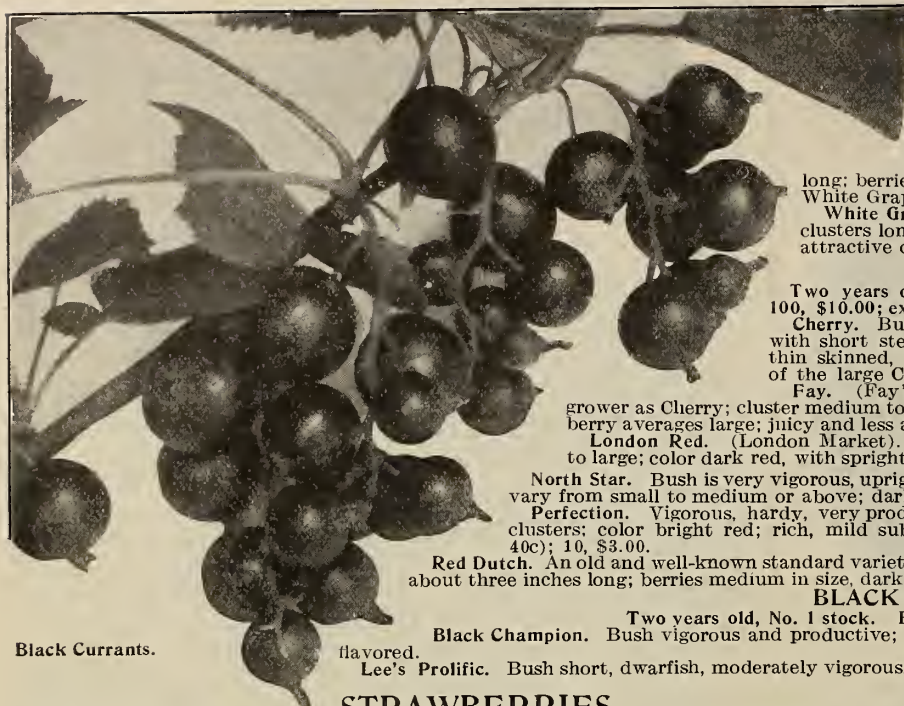
This certificate is good until Sept. 28, 1915, unless revoked.

G. W. PEAKE,
Acting Chief Inspector.

F. L. WASHBURN,
State Entomologist.



Northwestern Greening Apple.



Black Currants.

Price postpaid, 25, 35c; 50, 65c; 100, \$1.25. By express at buyer's expense, 100, \$1.00; 1000, \$7.50; 250 of a kind at 1000 rate, 25 at the 100 rate.

We have aimed to include only those varieties which by actual test have proven the most reliable for this section.

Bederwood (perfect.) One of the best for home use or market. Fruit large bright scarlet, firm and of fine quality. Early.

Brandywine (perfect.) A valuable late sort. Berries large, bright glossy crimson, firm and of good flavor.

Crescent. One of the oldest and best, and a great yielder under good cultivation.

Lovett (perfect.) A hardy variety, very firm berry of good color. Medium to late.

Sample (imperfect.) A large, fine berry; a great yielder and a good shipper. Makes a large plant, roots deep.

Senator Dunlap (perfect.) One of the best market berries, prolific and profitable; bright glossy red, of first class quality. Midseason.

Splendid (perfect.) Large, handsome deep red of fine quality.

Warfield (imperfect.) Plant with Bederwood for a fertilizer. An excellent sort, in appearance much like Senator Dunlap.

Everbearing Strawberries.

Everbearing Strawberries are no longer an experiment as they are now being successfully grown in many parts of the country. There is a demand everywhere for them.

While these varieties will produce fruit at the same time as the ordinary strawberries and continue to bear until frost, it is best to keep the blossoms removed until July 15th, so as to conserve the strength of the plant for the late crop. They should start to ripen the fruit about three weeks later and bear continuously until frost.

Price, dozen, 75c, postpaid; 100, \$5.00, by express at buyer's expense.

Americus. Fruit light red, heart-shaped, of fine texture and good quality, stem strong so fruit is held off the ground. Plants are strong, healthy and deep rooters.

Progressive. A very strong grower, of medium size, very heat resistant. Both blossoms and fruit are well protected by heavy foliage. The berries are rich and sweet, a deep red inside and out, quite firm and of good size. Very prolific.

Strawberry Culture. A rich, well-drained loam soil, having plenty of available humus and plant food is best for strawberries. If necessary to enrich the soil just before planting, use only commercial fertilizer, well rotted compost or sheep manure, to avoid weed seeds.

Plants. Use only the best plants. Inferior ones or those that have fruited once do not pay to set out. Our strawberry plants are grown to produce satisfactory results.

Varieties marked "imperfect" have imperfect flowers without pollen and must be interplanted with a perfect variety to pollinate them so they will bear well.

Planting Time. Planting from April 25th to May 15th is best for the Northwest.

Setting Plants. Upon arrival, dip roots into liquid mud and keep them moist, never expose to sunlight or wind. To set plants for the old matted row system, plant in rows 3 to 3½ feet apart, 12 to 15 inches apart in row. Then runners are allowed to form dense beds or rows. A better way is to plant 2 feet apart each way; first trim ends of roots slightly, spread them out fan-shape and drop each plant into the space made by forcing a spade straight down into earth.

Then work up the earth around plant and settle firmly, so crown is a trifle lower than the surface, but not covered. Water each plant.

General Care. Pinch off blossoms the first year, keep beds weed free and well cultivated. Train runners around parent plant like spokes of a wheel. Thus plants develop evenly and yield well. After ground freezes, cover with 4 to 6 inches of straw.

Small Fruits.

CURRENTS

WHITE CURRENTS

Two years old, No. 1 stock. Each, 20c, (postpaid, 25c); 10, \$1.25; 100, \$10.00; except where noted.

White Dutch. Bush an upright grower, vigorous and very productive. Clusters two to three inches long; berries early, of medium size, translucent, slightly darker than White Grape; quality excellent.

White Grape. Bush vigorous, somewhat spreading, productive; clusters long; berries large to very large, averaging large; of very attractive color, mild flavor and good quality. Good table variety.

RED CURRENTS

Two years old, No. 1 stock. Each, 20c, (postpaid, 25c); 10, \$1.50; 100, \$10.00; except where noted.

Cherry. Bush vigorous, stocky and compact; cluster rather short, with short stems; fruit averages large; color, fine bright red; berry thin skinned, juicy and fine-flavored. One of the most productive of the large Currants.

Fay. (Fay's Prolific). Bush vigorous but not quite so strong a grower as Cherry; cluster medium to long, with rather long stems; color darker than Cherry; berry averages large; juicy and less acid than Cherry.

London Red. (London Market). Bush vigorous, upright; clusters short; fruit medium to large; color dark red, with sprightly acid flavor. Very productive.

North Star. Bush is very vigorous, upright, somewhat spreading; clusters medium length; berries vary from small to medium or above; dark red; comparatively mild acid. Hardy, productive.

Perfection. Vigorous, hardy, very productive; berries larger than Cherry or Fay, with larger clusters; color bright red; rich, mild sub-acid; plenty of pulp, few seeds. Each, 35c, (postpaid, 40c); 10, \$3.00.

Red Dutch. An old and well-known standard variety. Bush a strong, tall, upright grower; clusters average about three inches long; berries medium in size, dark red; sprightly sub-acid flavor. Productive.

BLACK CURRENTS

Two years old, No. 1 stock. Each, 25c, (postpaid, 30c); 10, \$2.00.

Black Champion. Bush vigorous and productive; fruit averages above medium; pulp nearly sweet, mild-flavored.

Lee's Prolific. Bush short, dwarfish, moderately vigorous, productive; fruit varies from small to very large, acid.

BLACKBERRIES

Root-Cutting plants, each, 10c; 10, 60c, (postpaid, 85c); 100, \$5.00; 1000, \$35.00.

Ancient Briton. Of medium size and best quality; immensely productive. Extremely hardy, enduring severe winters without injury. A reliable market variety.

Early Harvest. Medium; glossy black, of excellent quality; ripens very early and ships well; compact, dwarf grower.

Snyder. Of medium size and fair quality when well ripened. The most popular Blackberry in this state. Ripens early; is productive and hardy.

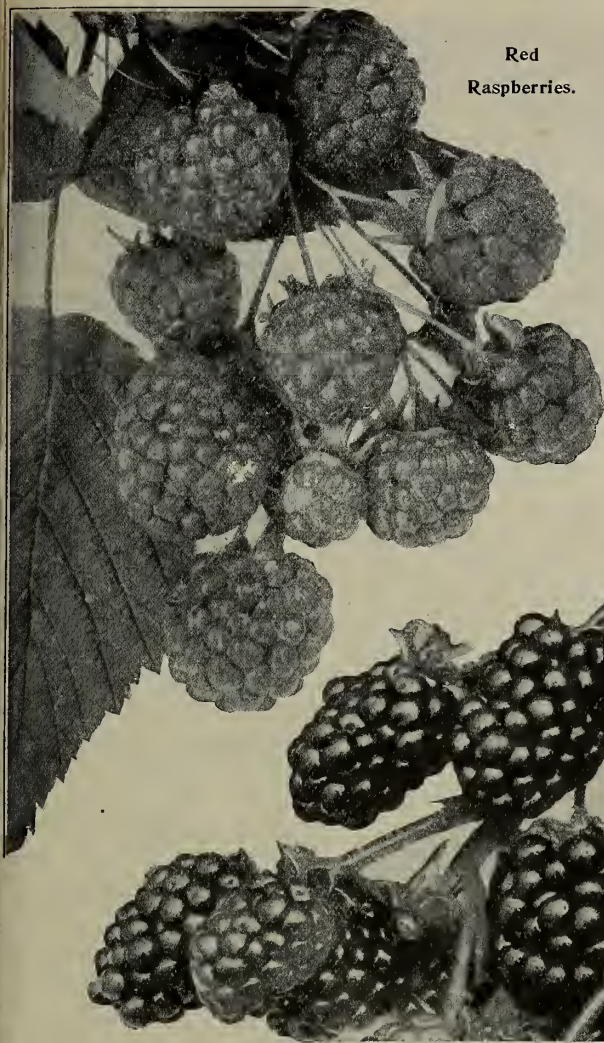
DEWBERRIES

Root-Cutting plants, each, 10c; 10, 60c, (postpaid, 85c); 100, \$5.00.

Lucretia. A low-growing trailing blackberry. Large; soft, sweet, of very good quality, with no hard core. The plant is quite hardy and, under favorable conditions, very productive. Earlier than Blackberries.



Senator Dunlap Strawberries.



Red
Raspberries.

GOOSEBERRIES

Two years old, No. 1 stock. Each, 25c, (postpaid, 30c); 10, \$2.00; 100, \$15.00, except where noted.

AMERICAN VARIETIES

Carrie. A very fine red, of vigorous growth and very prolific. Healthy and free from mildew. Hardy, fruit of good size and of excellent quality. A very promising sort, introduced by Mr. Wyman Elliott of Minneapolis.

Downing. Bush vigorous and very productive. Fruit medium to large, skin whitish green; flesh soft, juicy.

Houghton. Bush a vigorous grower, with rather slender branches; very productive. Fruit medium size, pale red, tender and good.

Pearl. Bush moderately vigorous; immensely productive. Fruit about the size of Downing, of fine quality.

Red Jacket. (Josselyn). Bush vigorous, upright and productive. Fruit varies in size from medium to above medium. Color pale red.

Transparent. One of the best for the North. Vigorous, hardy, very productive. Skin very thin and yet firm. Not new, was grown many years ago but has been lost sight of by the demand for large berries.

ENGLISH VARIETY

Industry. This is without doubt the most thoroughly tested and successful of the English varieties. The bush is strong, upright, immensely productive. Berries of the largest size, dark red. Each, 35c.

RASPBERRIES

Root-Cutting plants, each, 10c; 10, 75c, (postpaid, \$1.00); 100, \$6.00.

RED VARIETIES

Cuthbert. Deep, rich crimson, large to very large, very firm. One of the very best market varieties. Season medium to late. A remarkably strong, hardy and productive variety.

King. The leading market berry of Minnesota; firm, especially fine flavor; desirable for home or market use. A good bearer for a long time.

Marlboro. Light crimson, large, very firm, and of good quality. A fine early market variety; vigorous and productive.

BLACK AND PURPLE

Columbian. Dull purple, very large, moderately firm. A good market berry and one of the best for canning. Bush remarkably strong and wonderfully productive.

Cumberland. Black. Very large; very similar to Gregg in quality and firmness; in hardness and productiveness it is unexcelled. One of the best mid-season market varieties.

Blackberries.
Gregg. Black Raspberries. Has been for many years the leading market berry. Large, firm, of good quality, ripening late. Exceedingly productive.
Kansas. Black Raspberries. Berries as large as Gregg and of better color; very little bloom; of best quality; ripens early. Very strong grower and immensely productive.

GRAPES

Price, two years old, No. 1 stock. Each, 25c, (postpaid, 30c); 10, \$2.00, except where noted.

Brighton. Red. Bunch medium to large, long, compact, shouldered; berries medium; skin thin; flesh tender, sweet, with scarcely any pulp; quality best. Vine a vigorous grower, healthy, hardy and productive; one of the best early red Grapes. The flowers have reflexed stamens and do not always fertilize fully unless planted with Concord, Martha or other varieties which blossom at the same time.

Campbell's Early. Black. Bunch large, shouldered, moderately compact; berry large, nearly round, slightly elongated; adheres strongly to stem; skin thick, tough and does not crack; flesh somewhat pulpy, sweet, with slight aroma. It colors very early but requires some weeks after coloring to fully ripen; a fine shipping Grape. Each, 35c; 10, \$3.00.

Concord. Black. Early. Decidedly the most popular Grape in America, and deservedly so. Bunch large, shouldered, compact; berries large, covered with a rich bloom; skin tender, but sufficiently firm to carry well to distant markets; flesh juicy, sweet, pulpy, tender; vine a strong grower, very hardy, healthy and productive. For general cultivation the most reliable sort.

Delaware. Red. Bunch small, compact, sometimes shouldered; berries small; skin thin, but firm; flesh juicy, very sweet and refreshing, of best quality for both table and wine; Vine hardy, productive, a moderate grower; requires rich soil and good culture.

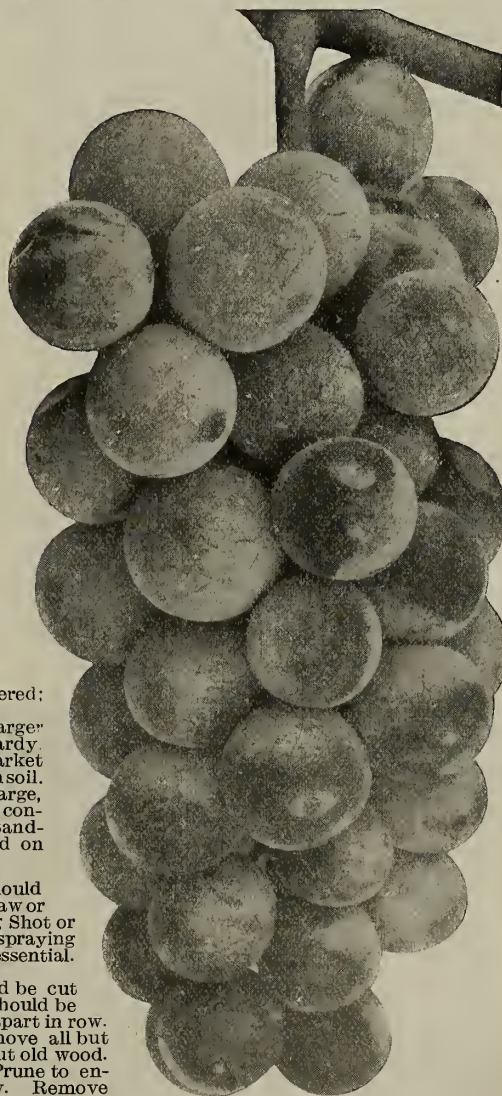
Martha. White, sometimes turning pale yellow when fully ripe. Bunch medium, compact, shouldered; berries medium, skin thin, tender, flesh very sweet. Vine healthy and hardy.

Moore's Early. Black. Bunch rarely shouldered, not quite as large as Concord; berries larger and very much like it in flavor and quality. Vine a moderate grower, very healthy and hardy. Produces a fair and, with high cultivation, a heavy crop. Ripens so early as to be nearly out of market before Concord is ripe and is, therefore, a very popular early market variety. Succeeds best on rich soil.

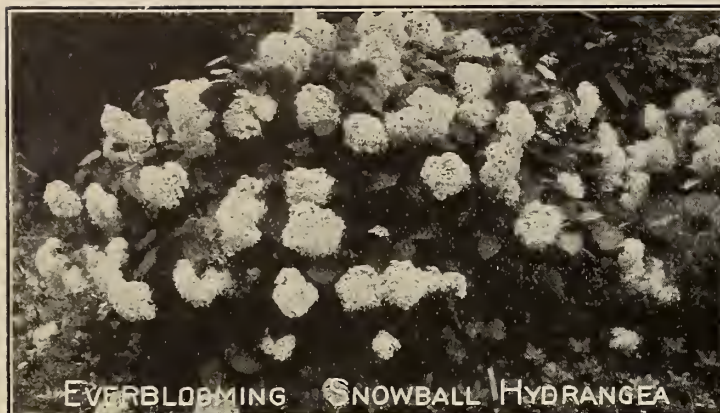
Pocklington. Pale green, usually with tinge of golden yellow where exposed to the sun; bunch large, very compact; berries very large, covered with a beautiful white bloom; flesh juicy, sweet, with considerable pulp. Vine a moderately good grower, but very healthy and very hardy, its buds withstanding severe cold even better than Concord. It produces a heavy crop of fine, showy clusters and on account of its fine appearance and many good qualities is yearly increasing in popularity.

Berry Culture. All berries do best in a rich, stiff loam, rather clayey than sandy. The ground should be retentive of moisture, yet well drained. They should all be mulched after ground freezes, with straw or other coarse litter for winter protection. For any leaf destroying worms use arsenate of lead, Slug Shot or some other insecticide. See page 150. For borers, remove the injured canes. Bordeaux mixture spraying will help check rust and blight but prevention is best—clean cultivation and proper pruning are essential. Always cultivate thoroughly until fruiting time.

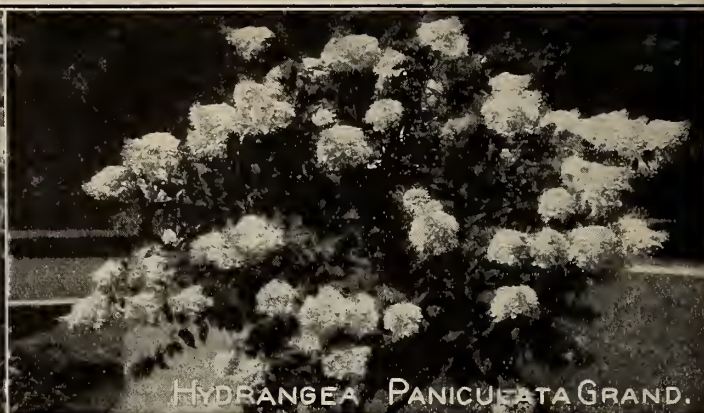
Blackberries. Set in rows 8 feet apart, space 2 to 4 feet apart in the row. The young canes should be cut back when 2 feet high to induce branching. Remove old canes every year after fruiting. They should be gathered and burned at once to prevent insects and diseases. **Currents.** Rows 6 feet apart, 4 feet apart in row. The fruit is borne on both old and young wood but the best is on 1 year old shoots and spurs. Remove all but 4 to 8 main stems. Leave no wood over 3 years old. Shorten vigorous, straggling shoots and thin out old wood. **Gooseberries.** Rows 5 feet apart, 3 feet apart in row. These bear best on 2 and 3 year wood. Prune to encourage continuous growth of vigorous shoots. **Raspberries.** Rows 6 feet apart, 4 feet apart in row. Remove old wood after bearing. Prune Black Raspberries when 18 inches high to induce branching.



Concord Grapes.



EVERBLOOMING SNOWBALL HYDRANGEA



HYDRANGEA PANICULATA GRAND.

LONICERA
BUSH HONEYSUCKLESPIRAEA
VAN HOUTTEI

HARDY ORNAMENTAL SHRUBS

Key to size and blooming period. To assist the buyer in making selections from groups and in their proper arrangement when planting, we give average height and season for blooming, using figures for the months. Thus "3-4 ft., 7-9" means that the species under ordinary conditions attains a height of 3 to 4 feet and blooms in the months of July, August and September. For hedges see page 97.

By express or freight only, except where noted. Five at the rate for ten, less than five at the each rate.

Amelanchier botryapium, var. Success. Success Juneberry. 5-6 ft. An improved variety of the native Juneberry. Bears white flowers in late April followed by dark red berries which are edible and of very good quality for pies, sauces, etc. It has a nice habit and fine foliage. Each, 40c; 10, \$3.50.

Berberis. Barberry. B. vulgaris. COMMON BARBERRY. 4-5 ft., 5. An upright grower with light green foliage, yellow flowers and crimson berries. Each, 40c, 10, \$3.50.

B. vulgaris, var. purpurea. PURPLE BARBERRY. 4-5 ft., 6. Deep purple. Each, 40c; 10, \$3.50.

B. thunbergii. THUNBERG'S JAPANESE BARBERRY. 3 ft., 6. Of low, spreading growth, forming a dense, impenetrable bush. Foliage takes on a splendid autumn coloring. Each, 40c, 10, \$3.50.

Caragana Arborescens. Siberian Pea Tree. 15-20 ft., 6. An upright grower and very hardy, with beautiful, dense acacia-like foliage. Yellow pea-shaped flowers. Each, 40c; 10, \$3.50.

Clethra Alnifolia. Sweet Pepper Bush. 4 ft., 7-9. A beautiful shrub with rich green foliage; showy white spikes in autumn. See illustration on opposite page. Each, 50c; 10, \$4.75.

Cornus Stolonifera. Red Osier Dogwood. 4-5 ft., 5. Very handsome and popular on account of its dark red bark which makes it peculiarly effective in winter. Each, 50c; 10, \$4.00.

C. Stolonifera, var. floricornis. YELLOW-BRANCHED DOGWOOD. Height 5 to 8 feet. Bright yellow bark in the winter, particularly effective in shrubberies. Each, 50c; 10, \$4.00.

Corylus. Hazelnut. 4-5 ft., 5. Its fruit although small is of splendid quality. Each, 50c; 10, \$4.00.

Deutzia. D. crenata. 5 ft., 6. Showy, white tinged pink flowers in close spikes. Each, 40c; 10, \$3.50.

D. Gracilis. 3 ft. One of the best low growing shrubs. Flowers pure white. Each, 40c; 10, \$3.50.

Diervilla rosea. Rose Flowered Weigelia. 5 ft., 5-6. A fine rose colored variety from China bearing large trumpet-shaped flowers. Each, 50c; 10, \$4.00.

Elaeagnus argentea. Russian Olive. Silver Berry. 5-20 ft. A beautiful, small growing tree with light gray, olive-shaped foliage, the young growth being of the same color. The small yellow flowers which appear in June have a delightful penetrating fragrance. Each, 50c; 10, \$4.00.

Euonymus atropurpureus. Burning Bush or Strawberry Tree. 7-8 ft., 6. Broad foliage with small but showy flowers in clusters, followed by crimson fruits. Each, 40c; 10, \$3.00.

Forsythia Fortunei. Golden Bell. 6-7 ft., 4-5. An upright spreading bush with handsome pendulous trumpet-shaped, bright yellow flowers. Foliage deep shining green. Each, 50c; 10, \$4.00.

Everblooming Snowball Hydrangea. (Hydrangea Aborecens Sterilis.) As many as 100 trusses of pure white flowers have been counted on one plant, some of them 7 3/4 inches in diameter. The ever-blooming habit of this variety is its most remarkable and valuable characteristic, blooming profusely from June until September. The top growth always dies back in the winter, so it starts up from the root each spring, making it almost a perennial in habit. Each, 50c.

Hydrangea paniculata grandiflora. LARGE PANICLED-FLOWERED HYDRANGEA. 7-8 ft., 8-9. The showiest of all autumn blooming shrubs, bearing immense heads of creamy white flowers, turning to pleasing shades of red with the approach of cold weather. 2 to 3 ft., each, 50c; 10, \$4.50.

Hydrangea. (Tree Form). Trained to a straight stem to produce a small tree for ornamental planting. Should be supported with a stake until trunk becomes heavy. Each, 75c.

Lonicera. Bush Honeysuckle.

L. tartarica. TARTARIAN HONEYSUCKLE. 8 ft., 6. Pink flowers which contrast beautifully with the foliage. A fine shrub for large hedges. Each, 50c; 10, \$4.50.

L. tartarica, var. alba. Creamy white flowers. Each, 50c; 10, \$4.50.

L. tartarica, var. grandiflora. Bright red flowers striped with white. Each, 50c; 10, \$4.50.

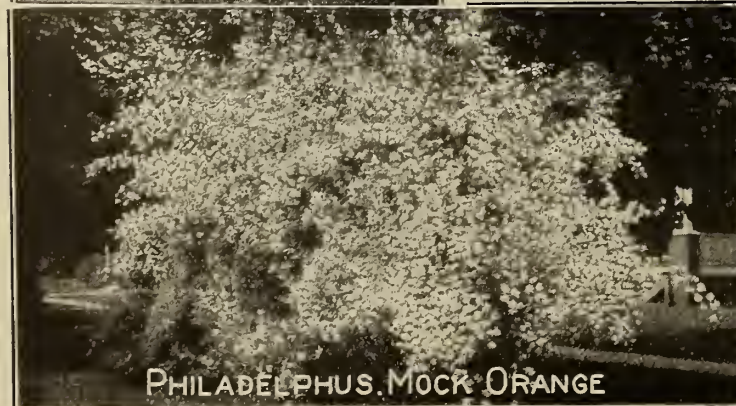
L. tartarica, var. splendens. Pink flowers are larger than the type. Deep red fruits. Each, 50c; 10, \$4.50.

Philadelphus. Syringa or Mock Orange.

P. coronarius. 7-10 ft., 6. Fragrant, pure white. Each, 40c; 10, \$3.50.

P. Gordonianus. GORDON'S SYRINGA. Strong, rapid growth; flowers large. Each, 40c; 10, \$3.50.

P. Grandiflorus. Large Flowered Syringa. Rapid growth, red bark; flowers large. Each, 40c; 10, \$3.50.



PHILADELPHUS MOCK ORANGE



SPIRAEA ANTHONY WATERER

Rhamnus catharticus. Buckthorn. 4-8 ft. This variety is being much used for hedges in the north and central states. It is a stiff, twiggy bush and bears shearing well. Dark green foliage and white flowers in June and July followed by showy black fruits. Each, 50c; 10, \$4.50.

Rhus. Sumach. Ornamental, very rapid growing shrubs and trees.

R. cotinus. MIST OR SMOKE TREE. 5-8 ft. A vigorous, bushy grower with large panicles of brownish-green, feathery flowers in June. Each, 40c; 10, \$3.50.

R. glabra. SMOOTH SUMACH. 6-7 ft., 6. Handsome pinnate foliage, assuming splendid autumn coloring; showy spikes of crimson fruits. Each, 40c; 10, \$3.50.

R. glabra var. laciniata. CUT LEAF SUMACH. 6-7 ft. Deep cut, fern-like foliage. Each, 50c; 10, \$4.50.

R. typhina. STAGHORN SUMACH. 7-10 ft. A large, handsome shrub with brilliant foliage and scarlet fruit in autumn. Each, 50c; 10, \$4.50.

Ribes. Flowering Currants.

R. aureum. MISSOURI CURRANT. 5-6 ft., 5. Golden yellow, spicily fragrant. Each, 40c; 10, \$3.50.

R. sanguineum. CRIMSON FLOWERED CURRANT. 3 ft., 7. Handsome, deep green foliage and very showy spikes of deep crimson flowers. Each, 40c; 10, \$3.50.

Rosa Rugosa. Japanese Rose. 4 ft. Elegant, broad, shining green foliage; continuous clusters of showy, large, single flowers followed by immense fruits which are very attractive late in the season. We carry two varieties in stock; one having red flowers and scarlet fruit; the other having white flowers and orange colored fruit. 2-year old, each, 40c; 10, \$3.50.

Sambucus. Elder.

S. canadensis. COMMON ELDER. 8 ft., 6-7. A useful plant where rapid growth and dense foliage are requisite. Dark purple berries used for jelly and wines. Each, 40c; 10, \$3.50.

S. nigra. EUROPEAN BLACK BERRIED ELDER. 6 ft., 6. A medium sized, handsome shrub with purplish-black berries in September. Each, 35c; 10, \$3.00.

S. nigra, var. aurea. GOLDEN ELDER. A magnificent variety with golden yellow foliage. Indispensable in grouping with other shrubs on account of the enlivening effect. Each, 40c; 10, \$3.50.

S. racemosus. SCARLET BERRIED ELDER. 8-9 ft., 5. White flowers followed by dense bunches of vivid colored fruits. Of decided ornamental value. Each, 50c; 10, \$4.00.

Shepherdia argentea. Buffalo Berry. 4-8 ft., 5. The coming shrub for ornamental hedges. Very hardy. Has a luxuriant growth of side spurs and the branches cover well with foliage after being trimmed. Leaves are a light green above and silvery beneath, giving an effect similar to the Russian Olive. Is also a very desirable specimen on the lawn. Each, 50c; 10, \$4.50.

Spiraea. Meadow Sweet. This class of shrubs offers a great variety, both in flowers and foliage, making them of great value in a collection. Of easy cultivation and rapid growth.

S. Billardi. BILLARD'S SPIRAEA. 4 ft., 6. A strong grower with dull green foliage and dense panicles of bright pink flowers. Each, 40c; 10, \$3.50.

S. Bumalda. 4 ft., 7-8. Very handsome Japanese species, dwarf but vigorous. Flowers rose colored and in profusion. Each, 40c; 10, \$3.50.

S. Bumalda, var. ANTHONY WATERER. 2-3 ft., 7-8. A fine new dwarf Spiraea with dark, crimson flowers, darker than Bumalda. See illustration on opposite page. Each, 50c; 10, \$4.00.

S. callosa. FORTUNE'S SPIRAEA. 3-4 ft., 6. Has large panicles of deep rosy blossoms. Grows freely and blooms nearly all summer. Each, 40c; 10, \$3.50.

S. opulifolia, var. aurea. GOLDEN SPIRAEA. 6-7 ft., 6. The strongest grower of this class and one of the most useful. Branches upright though drooping when loaded with its white flowers in June. Foliage is a bright, yellowish gold, finely shaped. An excellent sort for backing shrubbery or mass planting and also for hedges. Each, 40c; 10, \$3.50.

S. salixifolia. WILLOW LEAF SPIRAEA. 4-5 ft. An upright grower with narrow, pointed foliage and rosy flowers in June and July. Each, 50c; 10, \$4.00.

S. sorbifolia. ASH LEAVED SPIRAEA. 4-5 ft. A vigorous growing bush with large, handsome foliage resembling Mountain Ash. Long spikes of white flowers in July. Each, 40c; 10, \$3.50.

S. Van Houttei. VAN HOUTTE'S SPIRAEA. 4-5 ft., 5-6. The best and most popular of all Spiraeas. Its long, slender branches are arched by their own weight and when covered with the handsome bluish-green foliage and masses of white flowers, the branches droop until the tips touch the ground. See illustration on opposite page. Each, 50c; 10, \$4.50.

Symphoricarpos. Snowberry.

S. racemosus. SNOWBERRY. 4 ft. Rose colored flowers in July and August followed by white berries which remain until winter and make it very showy. Excellent for shaded places. Each, 40c; 10, \$3.50.

S. vulgaris. CORAL BERRY OR INDIAN CURRANTS. 3-4 ft. Resembles Racemosus but is more compact. The flowers which appear in July are succeeded by dark purplish-red berries in clusters. Valued for its persistent foliage and well adapted for shaded places. Each, 40c; 10, \$3.50.

Syringa. Lilac. We offer below some newer varieties, besides the old favorites.

S. Japonica. JAPAN TREE LILAC. 15-18 ft., 6-7. Pyramidal and upright in form, making a handsome little tree. Broad foliage and creamy white flowers; very late. Each, 50c; 10, \$4.50.

S. josikea. HUNGARIAN LILAC. 6-7 ft., 5-6. A distinct species of tree-like growth with dark shining leaves and purple flowers. Each, 50c; 10, \$4.50.

S. persica. PERSIAN LILAC. 5-6 ft., 5-6. From five to six feet high with small foliage and bright purplish flowers. Each, 50c; 10, \$4.00.

S. persica, var. alba. WHITE PERSIAN LILAC. Delicate white fragrant flowers sometimes shaded with purple. Each, 50c; 10, \$4.00.

S. Siberica alba. SIBERIAN WHITE LILAC. 7-8 ft., 6. A vigorous grower; foliage small and narrow, flowers white, bluish tint. Each, 50c; 10, \$4.00.

S. vulgaris. COMMON LILAC. 8-10 ft., 5. Bluish-purple flowers. Each, 40c; 10, \$3.00.

S. vulgaris alba. COMMON WHITE LILAC. Same as Vulgaris but pure white. Each, 40c; 10, \$3.00.

S. vulgaris, var. Chas. X. Leaves large, shiny; flowers reddish-purple in loose trusses. Each, 50c.

Viburnum.

V. opulus. HIGH BUSH CRANBERRY. 7-8 ft. One of the handsomest shrubs of this species. The large, white flowers are borne in profusion in May and are followed by clusters of scarlet berries which retain their color until late fall. Each, 50c; 10, \$4.00.

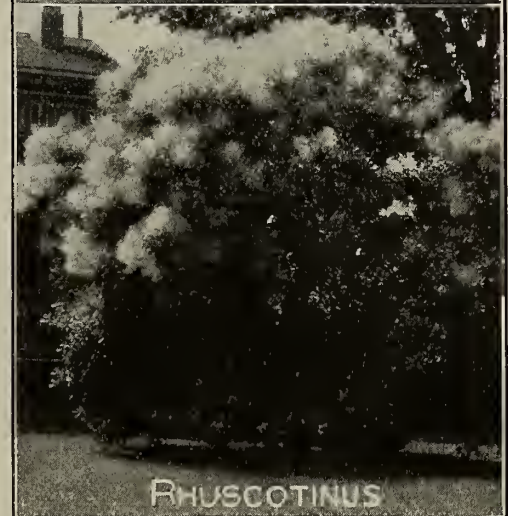
V. opulus, var. sterilis. SNOWBALL OR GUELDER ROSE. The old-fashioned, common Snowball. This has no fruit. Each, 50c; 10, \$4.00.

NOTE:—We offer a limited quantity of both these Viburnum in "Tree Form." These are trained up to a single stem allowing branches to come out three or four feet from the ground. They give a pleasing variation from the regular shrubbery effect. Very desirable for lawns. Each, 75c.

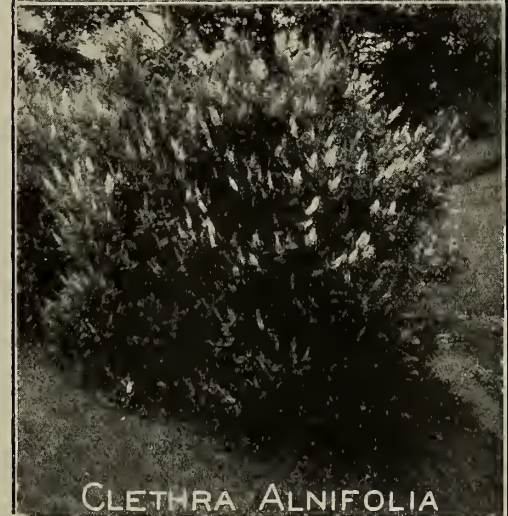
For Hedges and Evergreens see page 97.



LILAC



RUSCOTINUS



CLETHRA ALNIFOLIA



SNOWBERRY



SNOWBALL



SPIRAEA SALIXIFOLIA

Hardy Trees for Northern Planting.

The best grown trees are Northern Grown trees. Why? Because there are no other trees so vigorous in growth, so hardy in resisting cold winters and dry summers, so early to bloom, so early to fruit, as the trees that are grown where the season of growth is short and the season of rest and wood-ripening is long. The demand for hardy ornamental nursery stock is steadily increasing. Each year we receive more orders for this class of stock, and more inquiries as to what varieties are suited to culture in this latitude. People are coming to recognize that the standard of hardiness applied in the catalogues of nurseries in the eastern and central states is not a safe standard for Minnesota and adjoining territory.

To meet the demand for hardy stock we have prepared the following list as comprising the best varieties grown and which have been sufficiently tried to warrant their recommendation. Many well known sorts have been omitted for various reasons—lack of hardiness in particular—and the collection thus includes those things which are most desirable and dependable for ornamental planting north of the 40th parallel and west of longitude 85 degrees. Hardy nursery stock is what you want—it is what you must have if you make a success in planting. This alone is a sufficient reason why you should favor us with your orders.

Hardy Shade and Ornamental Trees.

Under this head we include selected varieties of Deciduous Trees and Coniferous Evergreens best adapted for use in the North.

Our stock in this class is all strong, transplanted, offering well developed roots and good form. The stock quoted here is of the sizes most used for lawn planting, averaging between $\frac{3}{4}$ inch to $1\frac{1}{4}$ inches in caliper and 6 to 12 feet in height according to the variety. Diameter given is at 1 ft. from ground. In most varieties 1 inch trees average 6 to 8 feet, $1\frac{1}{4}$ inch, 8 to 10 feet, etc. By express or freight only.

Acer. Maple.

A. dasycarpum. WHITE OR SILVER MAPLE, SOFT MAPLE. The well known North American species; a favorite street tree. $1\frac{1}{4}$ inch, each, 75c; 10, \$6.00; 1 inch, each, 60c; 10, \$4.50.

A. dasycarpum var. *Weirii* Laciniatum. WEIR'S CUT LEAVED SILVER MAPLE. A remarkable and beautiful tree, much planted in the past quarter century. Its growth is rapid, branches slender and drooping, giving it a habit almost as graceful as the Cut Leaved Birch.

It ranks among the most interesting and attractive lawn trees and is especially adapted to small places. Bears trimming well. 1 inch, each, \$1.25; 10, \$10.00; $\frac{3}{4}$ inch, each, \$1.00; 10, \$8.50.

A. saccharinum. SUGAR OR ROCK MAPLE. A well known native tree of elegant pyramidal form. Much used for avenue planting, and makes a splendid specimen tree for its brilliant autumnal coloring. $1\frac{1}{4}$ inch, each, \$1.25; 10, \$10.00; 1 inch, each, \$1.00; 10, \$9.00.

Betula. Birch.

B. alba. EUROPEAN WHITE BIRCH. Tree graceful, quite erect when young but assumes a drooping habit with age. $1\frac{1}{4}$ inch, each, 85c; 10, \$7.50.

B. alba var. *pendula laciniata*. CUT LEAVED WEeping BIRCH. This variety is the most popular of all pendulous trees. Its tall, slender yet vigorous growth, gracefully drooping branches, silvery white bark and delicately cut foliage present a combination of attractive characteristics rarely met with in a single tree. Hardy and desirable everywhere. $1\frac{1}{4}$ inch, each, \$1.25; 10, \$10.00.

B. populifolia. AMERICAN WHITE BIRCH. The well known American species; of rapid growth and fine foliage. $1\frac{1}{4}$ inch, each, \$1.00; 10, \$8.50.

Catalpa bignonioides, var. speciosa. Western Catalpa.

Much used in forestry plantings. Its blossoms open two or three weeks later than eastern varieties. Hardy except in extreme seasons. $1\frac{1}{4}$ inch, each, \$1.00; 10, \$9.00.

Fraxinus viridis. Green Ash. Much used as a street tree on account of its fine, regular form and hardy characteristics. $1\frac{1}{4}$ inch, each, \$1.00; 10, \$8.50.

Gymnocladus canadensis. Kentucky Coffee Tree.

A strikingly ornamental, irregular open-topped tree with peculiar, rough barked and twigless branches; immense, broad, double compound foliage of a peculiar bluish green color. The flowers are white in open racemes followed by large, long, brown pods. $1\frac{1}{4}$ inch, each, \$1.25; 10, \$10.00.



MOUNTAIN ASH



White or Silver Maple.

Juglans. Walnut.

J. cinerea. BUTTERNUT. A broad, open-topped, ornamental tree with light green, compound foliage and characteristic gray bark. $1\frac{1}{2}$ inch each, \$1.00; 10, \$9.00.

J. nigra. BLACK WALNUT. A well known native tree and very ornamental. 1 inch, each, 75c; 10, \$6.00.

Morus alba, var. *moretti*. RUSSIAN MULBERRY. A valuable ornamental tree. Leaves are serrated with five to twelve lobes and are very ornamental. 1 inch, each, \$1.00; 10, \$9.00.

Negundo fraxinifolium. Box Elder. A native tree, Maple-like in its foliage. An extremely hardy and rapid growing tree; much planted on the prairies. $1\frac{1}{2}$ inch, each, 75c; 10, \$6.50.

Populus. Poplar. *P. alba*. WHITE OR SILVER POPLAR. A tree of wonderfully rapid growth and wide spreading habit and white as snow beneath. $1\frac{1}{4}$ inch, each, 85c;

it. Leaves large, lobed, glossy green above and white as snow beneath. $1\frac{1}{4}$ inch, each, 85c; 10, \$7.50.

P. canadensis. COTTON WOOD. Well known, tall growing, native tree. $1\frac{1}{4}$ inch, each, 75c; 10, \$6.00.

P. monilifera. CAROLINA POPLAR. Has sprung into great popularity of late. Pyramidal in form and of robust growth. Valuable for street planting and screens. $1\frac{1}{4}$ inch, each, 75c; 10, \$6.00.

P. fastigiata. LOMBARDY POPLAR. Attains a height of 100 to 150 feet. Remarkable for its erect, rapid growth and tall spire form. Indispensable in landscape gardening to break the ordinary and monotonous outlines of other trees. $1\frac{1}{2}$ inch, each, \$1.00; 10, \$8.50.

P. balsamifera. BALM OF GILEAD OR TACAMAHAC. A remarkably rapid growing tree with luxuriant foliage and fragrant buds. 1 inch, each, 75c; 10, \$6.00.

Salix pendahta. AMERICAN WEeping Willow. A vigorous grower with beautiful pendulous branches. Forms a round, even-shaped head and is valuable for lawn ornament in the North. When used as a street tree, the Pendahta gives quick effects and it may be kept in almost any desired form by judicious pruning. 1 inch, each, 75c; 10, \$6.00.

S. Vitellina var. *pendula nova*. NIOBE WEeping GOLDEN WILLOW. A weeping or drooping form. It has graceful, drooping branches, and is of regular habit. One of the most promising novelties in recent years as there is need of a strictly hardy, weeping willow in the North for lawns, parks and cemeteries. A beautiful tree with long pendant, bright yellow branches and red twigs. $\frac{3}{4}$ inch, each, \$1.00; 10, \$8.50.

Sorbus. Mountain Ash. *S. aucuparia*. EUROPEAN MT. ASH. A handsome ornamental tree with fine pinnate foliage. Bears numerous clusters of bright red berries which are very conspicuous from mid-summer until frost. $\frac{3}{4}$ inch, each, 75c; 10, \$6.00.

S. aucuparia var. *pendula*. WEeping EUROPEAN MT. ASH. A beautiful variety of decided pendulous habit. Covered from July until winter with large clusters of bright scarlet berries. One of the finest trees for lawn ornament in the North. 1 year heads, each, \$1.25.

S. aucuparia var. *quercifolia*. OAK LEAVED MT. ASH. A hardy tree of fine pyramidal habit and small size; popular on city lawns. 1 inch, each, \$1.25.

Tilia. Linden. *T. Americana*. AMERICAN LINDEN OR BASSWOOD. A vigorous grower of pyramidal habit when young but eventually a large, round-headed tree. Its foliage is very large and of a light green color. One of the best ornamental trees. Valuable for street planting and also most useful as a specimen tree. 1 inch, each, \$1.00; 10, \$8.50.

T. Europaea. EUROPEAN LINDEN. A vigorous grower but of much smaller size than the American Linden. The foliage is smaller and green on both sides. When in bloom it is very handsome. 1 inch, each, \$1.00; 10, \$8.50.

Ulmus. Elm. *U. Americana*. AMERICAN ELM. A magnificent native tree and probably the most used of any in the Northwest for street and lawn planting. One of the most characteristic and picturesque of American trees. $1\frac{1}{4}$ inch, each, \$1.25; 10, \$10.00; 1 inch, each, \$1.00; 10, \$8.50.



Beautify your home grounds by surrounding them with stately Evergreens, highly ornamental throughout the year, particularly picturesque in winter.

EVERGREENS AND HEDGES.

CONIFEROUS EVERGREENS.

The cone-bearing Evergreens which are natives of the northern states furnish some of the most valuable trees for ornamental planting—especially since they alone can give color to the winter landscape when all deciduous trees are bare. Evergreens are a permanent asset. As windbreaks and hedges they raise the temperature, keep the air more moist and protect against damaging winds. Farmers find them invaluable and it is becoming a common practice to surround the orchard with an evergreen shelter belt.

Abies Balsamea. Balsam Fir. A slender pyramidal tree of rapid growth and well adapted to lawn planting. Foliage dark green, silvery beneath. Very handsome and well formed tree. 18 to 24 inches, each, 50c; 10, \$4.50; 24 to 30 inches, each, 75c; 10, \$6.00.

Picea. Spruce. **P. alba. WHITE SPRUCE.** One of the shapeliest Spruces in cultivation. Foliage silvery blue; growth compact and pyramidal. A native tree of great merit. 18 to 24 inches, each, 50c; 10, \$4.50; 24 to 30 inches, each, 75c; 10, \$6.00.

P. Douglasii. DOUGLAS SPRUCE FROM COLORADO. Large, conical in form with horizontal spreading branches, foliage light green above, glaucous below. 18 to 24 inches, each, 85c; 10, \$7.50.

P. excelsa. NORWAY SPRUCE. A well known variety. Hardy but not so successful in the North as Picea Alba. 24 to 30 inches, each, 75c; 10, \$6.00; 3 to 4 feet, each, \$1.00.

P. nigra. BLACK SPRUCE. A native variety of pyramidal form. Suitable for dry soils; one of the hardiest evergreens for northern planting. 24 to 30 inches, each, 50c; 10, \$4.00; 3 to 4 feet high, each, 75c.

P. pungens. COLORADO SPRUCE. A noble tree from the Rocky Mountains. Branches stiff and close. Foliage light green. A valuable lawn tree. 18 to 24 inches, each, 85c; 10, \$7.50; 24 to 30 inches, each, \$1.00.

P. pungens, var. glauca. COLORADO BLUE SPRUCE. A form of P. Pungens with the same general character but foliage of an exceedingly rich silvery blue. One of the most valuable for ornamental planting. 18 to 24 inches, each, \$3.50; 2 to 3 feet, each, \$5.00.

Pinus. Pine. **P. austriaca. AUSTRIAN PINE.** Round form, vigorous growth; glossy, dark green foliage. Good for a specimen or mass planting. 24 to 30 inches, each, \$1.00; 10, \$9.00; 3 to 4 feet, each, \$1.25.

P. montana. DWARF MT. PINE OR MUGHO PINE. A low, broad spreading tree, really more of a bush. Dwarf branches with deep green foliage. 12 to 18 inches, each, 80c; 10, \$7.00; 18 to 24 inches, each, \$1.00; 10, \$9.00.

P. strobus. WHITE PINE. One of the most stately, beautiful and valuable of our native evergreens. Tall and straight with slender, glaucous foliage somewhat tufted at end of branch. An extremely graceful tree and valuable all over the Northwest. 18 to 24 inches, each, 50c; 10, \$4.50; 24 to 30 inches, each, 60c; 10, \$5.00.

P. sylvestris. SCOTCH PINE. A luxuriant grower in most any soil. Forms a broad, pyramidal tree of dense growth. Foliage of a pleasing bluish green. 18 to 24 inches, each, 50c; 10, \$4.50; 24 to 30 inches, each, 75c; 10, \$6.00.

Thuya. Arbor Vitæ. **T. occidentalis. AMERICAN ARBOR VITÆ.** Our well known native variety and one of the best, if not the best, evergreen for hedges as it permits severe pruning and may be trained into any desired form. Extremely hardy, transplants easily and succeeds in nearly any soil. 18 to 24 inches, each, 45c; 10, \$4.00; 24 to 30 inches, each, 50c; 10, \$4.50.

T. occidentalis, var. pyramidalis. PYRAMIDAL ARBOR VITÆ. Very upright with same habit as Irish Juniper. Growth very dense with rich, dark, luxuriant foliage. Very useful where columnar effects are desired. 18 to 24 inches, each, 85c; 10, \$7.50; 24 to 30 inches, each, \$1.00; 10, \$9.00.

T. occidentalis, var. siberica. SIBERIAN ARBOR VITÆ. Growth compact; forming a round, even head. Works well in groups with Pyramidalis. 18 to 24 inches, each, \$1.00; 10, \$8.50.

Evergreen Trees by Mail.

Fine for hedges, windbreaks and ornamental lawn planting. Twelve different packages. These packages cannot be broken. By mail postpaid, \$1.00 per package, 6 packages for \$5.00.

These varieties have been thoroughly tested, proven hardy and reliable; will grow successfully in all parts of the country. Complete planting instructions and cultural directions furnished with each order. Send in your orders as early as possible to avoid disappointment. Shipment will be made in April or May. You cannot afford to overlook these wonderful collections.

No. Quantity	Seedlings Age.	No. Quantity	Seedlings Age.
1.-100 Norway Spruce	3 yr.	7.-100 Amer. Arbor Vitæ	3 yr.
2.-100 Scotch Pine	2 yr.	8.-100 Dwarf Mountain Pine	3 yr.
3.-100 Douglas Fir	2 yr.	9.-100 Jack Pine	2 yr.
4.-50 Colo. Blue Spruce	2 yr.	10.-100 Concolor Silver Fir	2 yr.
5.-100 White Pine	2 yr.	11.-100 Ponderosa Pine	3 yr.
6.-50 Black Hill Spruce	3 yr.	12.-100 White Spruce	3 yr.

Price, postpaid, \$1.00 per package, and 6 for \$5.00.

Evergreens can be safely transplanted long after the deciduous trees and shrubs have come into leaf. Do not postpone planting them until fall. Do it in April, May and early June.

Hardy Hedge Plants. Plant in April.

Per 100	Per 100
Arbor Vitæ, Amer. 1 to 1½ ft. \$17.50	Buckthorn, 2 to 3 ft., transp. 25.00
Arbor Vitæ, Amer. 1½ to 2 ft. 20.00	Red Twigged Dogwood, 2 to 3 ft. 25.00
Barberry, green, ¾ to 1 foot seedlings 5.00	Hardy Hydrangea, 2 to 3 ft. 30.00
Barberry, purple, ¾ to 1 foot seedlings 6.00	Lilac, white, 2 to 3 ft. 25.00
Barberry, Japanese, 1 to 1½ ft. transplanted 25.00	Lilac, purple, 2 to 3 ft. 25.00
Buffalo Berry, ¾ to 1 ft. seedlings 3.50	Rosa Rugosa, 2-year-old 20.00
Buffalo Berry, 2 to 3 ft., transp. 25.00	Spiræa, Van Houttei, 2 to 3 ft. 25.00
Buckthorn, 1 to 1½ ft. seedlings 5.00	Spruce, White, 12 to 18 in. 25.00
	Spruce, White, 18 to 24 in. 30.00
	Spruce, Hemlock, 12 to 18 in. 25.00
	Spruce, Hemlock, 18 to 24 in. 35.00

TWENTY-FIVE SELECT GLADIOLI.

A search of the floral kingdom, be it ever so painstaking and complete, will discover no flower to match the Gladiolus in ease of culture or another which shows so great a diversity of color in endless combination and variety. It is matchless, whether used in garden rows, for interplanting with shrubs or as a cut flower. The great advancement recently effected in the size and colors of the blossoms justly entitle the Gladiolus to the position it now holds, aristocrat of the border.

The amateur gardener appreciates its sure blooming qualities, the stored up nourishment in the bulb making certain its vigorous growth. Seldom attacked by insect or disease, it blossoms under conditions which would discourage any less hardy bulb or plant, although improved blooms well repay extra good care.

As a cut flower, the florist values its delicate shades, its splendid form and fine decorative effect when used in bouquets.

Several of the newer varieties reproduce themselves very sparingly, hence they continue to be rare and valuable for years. But fortunately, many beautiful sorts are within the reach of all. No garden exists, however small it be, in which Gladioli cannot find a useful place.



Gladiolus Jessie.

Culture. The Gladiolus thrives in a sunny location, protected from wind. It appears to best advantage when planted among Paonies, shrubbery or in masses or rows bordered with some lower growing plants such as Candytuft, Alyssum or Bachelor's Buttons. These make a pleasing contrast with the tall, stiffer foliage of the Gladiolus.

Gladiolus bulbs will grow in any good garden soil, but do much better when the latter has been enriched with well rotted manure. If the bulbs are planted at intervals from April to June the blooming period will extend from July until frost. A trench should be dug five inches deep and an inch of sand placed in the bottom to absorb surplus moisture. Then set the bulb (flat or hollow side down) in the sand.

For earliest blossoms, draw 2 inches of soil over the bulbs at first, replacing the rest when the shoots appear. As the leaves develop, more earth should be drawn up around the base, to furnish support for the stalk. Keep the bed free from weeds and give plenty of water, especially during the blooming period. When the flower buds appear they should be staked.

For Cut Flower Use. The spike should be cut as soon as the first flower opens on the stalk, preferably before the dew is off in the morning but never in the heat of the day. Cut the stem about 9 inches above the ground and with as little foliage as possible. The foliage is needed for the development of the new bulb. Place the cut flowers in a deep vase, with at least 8 inches of water. Remove the faded blossoms, cut a little off the stem and change the water daily. Treated in this way all the buds will open, and a spike will last a week or ten days in the house.

Before the ground freezes lift the bulbs, cut off half the foliage and remove to a cool shed or cellar. Here they should be spread out to dry, leaving plenty of air space between all bulbs and tops to prevent mould. A convenient method is to stand them up in flats which are then piled in tiers, with air spaces between.

After the tops dry up they should be cut off with a sharp knife or pruning shears. At this time also, the bulbs may be separated and the small side growths, or bulblets removed. The latter may be handled just like the big bulbs, except they should not be planted so deep. They will form blooming bulbs in three or four years. Then the bulbs are placed in paper bags, sawdust or sand to prevent them from becoming too dry. Lastly, remove to a storage room having a temperature of about 35 degrees, to prevent sprouting.

America. An Exquisite Delicate Pink. A fine color, very large blossoms, of very robust growth. See inside front cover page. Each, 6c; doz., 50c; 100, \$3.50.

Attraction. Deep Crimson and White. The large white center and throat make a fine combination with the crimson petals. Each, 6c; doz., 60c; 100, \$4.00.

Augusta. Popular White. Splendid large white blossoms with blue anthers. Each, 6c; doz., 50c; 100, \$3.50.

Baron Hulot or Blue King. Rich Deep Violet. A fine, dark shade, bordering on blue. Should be planted with a light variety for contrast. Each, 8c; doz., 75c; 100, \$5.00.

Brenchleyensis. Vermilion Scarlet, Late Blooming. sort, one of the best where one shade of good scarlet is desired. Each, 4c; doz., 35c; 100, \$2.50.

Canary Bird. Clear Canary Yellow. A pure canary shade that is very pleasing. Fine for planting with Augusta. Each, 10c; doz., \$1.10; 100, \$7.50.

Cardinal. Most Intense Scarlet. A perfect flower and spike, very large and of the brightest, most intense cardinal color. Each, 15c; doz., \$1.50; 100, \$10.00.

Ceres. Pure White, Spotted Rose. One of the best of the light shades. Each, 5c; doz., 45c; 100, \$5.00.

Contrast. One of the Most Striking. One of the most beautiful Gladioli ever brought out. Color, intense scarlet with large, distinct pure white center. Compact spike, flowers of great substance. Each, 40c; doz., \$4.00; 100, \$30.00.

Empress of India. Deep Maroon. A rich velvety shade, very decorative. Each, 6c; doz., 50c; 100, \$3.50.

Eugene Scribe. Pale Rose, Red Blaze. Very large and wide, tender rose, blazed carmine-red. Fine for cutting. Each, 7c; doz., 75c; 100, \$5.00.

Halley. Salmon Pink, Shaded Yellow. The predominating color of the flowers is delicate pink with a slight roseate tinge. The lower petals bear a creamy blotch with a bright red stripe through the center, producing a superb effect. Each, 6c; doz., 50c; 100, \$3.50.

Hollandia. Yellow Salmon. An Unusual Shade. A rare color in Gladioli, very attractive to use with Kunderdi Glory for cut flowers. One of the finest late varieties. Each, 4c; doz., 40c; 100, \$2.50.

Jessie. Long Velvety Red Spikes. An early bloomer of exceptionally rich color. Each, 6c; doz., 60c; 100, \$4.00.

Kunderdi Glory. Cream Pink. Ruffled Petals. Large, sturdy flower pale with a crimson stripe through each lower petal. All the petals are daintily ruffled. Each, 7c; doz., 70c; 100, \$5.00.

Lily Lehman. Pure White, Frilled Edge. White shading into a rose tint. Especially effective when planted near America or Panama. Each, 6c; doz., 60c; 100, \$4.00.

Madame Monneret. Pale to Deep Rose. Very handsome. Each, 6c; doz., 50c; 100, \$3.50.

Mrs. Frances King. Most Popular Light Scarlet. Of exceptional value for cut flower use. Separate flowers often measure 4 to 5 inches across and 5 to 6 flowers are open at one time. Each, 5c; doz., 45c; 100, \$3.00.

Nezinscott. Bright Blood-Scarlet, Bold and Striking. Fine scarlet, velvety, crimson-black blotches and white mottlings. Each, 10c; doz., \$1.00; 100, \$7.00.

Panama. Finest New Pink. It resembles its parent, America, but is richer in shade and larger. The flower spike is exceptionally long. A matchless variety in its class, having taken prizes at Newport and many other famous flower shows. Each, 35c; doz., \$3.50; 100, \$25.00.

Pink Beauty. Pale Claret Pink, Shaded Deeper. Bright carmine rose, darker blotch on lower petals, early, fine cut flower. Each, 4c; doz., 40c; 100, \$2.50.

Princeps. The Amaryllis Flowered Gladiolus. Splendid, late flowering variety; flowers of enormous size, 5½ inches in diameter and a dazzling scarlet-red color with a small white band on each lower petal. Spikes produce 12 to 15 flowers and grow 4 feet in height. Each, 6c; doz., 60c; 100, \$4.00.

Salmonette. Very Dainty. A beautiful variety, clear salmon rose. Each, 5c; doz., 40c; 100, \$2.75.

Willy Wigman or Blushing Bride. Delicate Rose. Rose with soft carmine blotch. Each, 5c; doz., 45c; 100, \$3.00.

Wild Rose. Blush Pink. A remarkable new variety of true Wild Rose shade. Each, 10c; doz., \$1.10; 100, \$8.00.

NORTHROP, KING & CO.'S GLADIOLUS MIXTURES.



Northrup, King & Co.'s "Sterling" Mixture of Gladioli.

Amateurs with limited space for Gladioli will find these most satisfactory. They include white and light tints, pink and red.

This is an extra choice mixture of all colors and many types. Only large, blooming bulbs are included. It has been prepared for the sole purpose of giving a first class combination of varieties at a reasonable price. It contains some of the finest named Gladioli in addition to the most beautiful new seedlings and latest introductions. The spikes grow tall and erect. Orchids cannot surpass them in their varied and delicate shades, markings and blendings—pink, rose, scarlet, red, white and light tints. Some are self-colored, some with beautiful, mottled throats. Nothing finer has ever been offered at the price. Doz., 40c; 100, \$2.50; 1000, \$20.00.

Giant Flowering Mixed Gladioli.

Splendid for planting in masses and for showy backgrounds.

These are grown from seed of the finest strains and are unexcelled for variation of color, well formed flowers and healthy bulbs. They contain a large proportion of show flowers. In this mixture all shades of color are well represented but by careful selection pink and cherry carmine now outnumber the darker shades, while white grounds are also prominent. They send up beautiful, large, flower stalks four or five feet high. Many branch freely, so that one stem produces three or four blooming spikes. The flowers are of great size, frequently seven to nine inches across. We recommend using these chiefly for massing and producing showy backgrounds as the stiffer form of this type may not appeal to some gardeners so much as the more graceful spikes of the Sterling Mixture. Each, 5c; doz., 40c; 100, \$2.50; 1000, \$20.00.

Excelsior Mixture.

A selected strain of hybrid seedlings from very choice parent stock. We can recommend this mixture as being one of extra good value. Light shades predominate. 35c per doz., 100, \$2.25; 1000, \$20.00.

Fine Mixed Gladioli.

As the name signifies, this is a fine mixture and recommended to our customers who desire to make a brilliant show in the garden at a small cost. Plant them freely, and you will be delighted with their fine colors. Shades of red and pink in many combinations are prominent in this mixture. Doz., 30c; 100, \$1.75; 1000, \$15.00.

Lemoine's Butterfly Hybrids.

This is an extra fine mixture of spotted and mixed blossoms. The gorgeous colorings and gay markings have caused these to be known as the "Butterfly Gladioli." Yellow, crimson, white, brown and pink are blended together to produce the most striking effects. Besides their gay colors and odd markings, they bloom two or three weeks earlier and are in full perfection before other sorts appear. 35c per doz; \$2.50 per 100; \$20.00 per 1000.

Childsi Mixed Gladioli.

This mixture includes a complete range of color but there are fewer dark shades and more of the pink and bluish tints in addition to the pale carmine and white. The flowers are extra large, strong growers. The bulbs in this mixture are very large and fine. Each, 5c; doz., 40c; 100, \$2.50; 1000, \$20.00.

Northrup, King & Co.'s

1915 Introductory Offer of Gladioli.

A special mixture with a complete range of color—shades of scarlet and red, pink and rose, white, striped and variegated. This assortment is sure to please and at the price, for strictly No. 1 selected bulbs, our customers can well afford to make extensive plantations. For successive bloom plant a few every ten days from April to July. Doz., 45c; 100, \$3.00; 1000, \$25.00, by express at purchaser's expense. If wanted by mail add 10c per doz. for postage. Six at doz. rate, 25 at 100 rate, 250 at 1000 rate.

Gladioli in Separate Shades.

We offer strictly selected first size bulbs only, sure to give satisfactory flowering results the first season. Order early.

	Doz.	100	1000
White and Light Shades. Very desirable for cut flowers and exquisite indoor decorations.....	\$.50	\$3.50	\$30.00
Pink and Rose. Many shades from faint tints to deep rose and cherry, all very attractive colors....	.40	2.75	25.00
Scarlet and Red. Splendid, rich bold colors.....	.35	2.50	18.00
Orange and Yellow. Unusual and charming shades in Gladioli. Fine for planting with the lighter varieties for a beautiful contrast.....	.65	5.00	45.00
Striped and Variegated. All sorts of handsome color combinations, some with different colored throats, many with stripes and blotches.....	.50	3.50	30.00
Pink and White Shades. Fine for cutting.....	.50	3.50	30.00
Blue Hybrid Seedlings. Rare colors of extreme beauty, rich blues, velvety purple, etc. Should be planted with light shades for contrast.....	1.00	6.00	50.00

By mail, 10c a dozen, extra.

Collection E.

One of each of the Twenty-Five Selected Gladioli listed on the opposite page, \$2.00, prepaid. A splendid opportunity to secure a beautiful collection.

Collection F.

Six of each of the Twenty-Five Selected Gladioli, described on the opposite page, 150 bulbs in all, \$10.00, by express at purchaser's expense. If wanted by parcel post add at the rate of 10c a dozen extra.

Collection G.

Twelve of each of the Twenty-Five Selected Gladioli described on the opposite page, 300 bulbs in all, \$20.00, by express at purchaser's expense. If wanted by parcel post add at the rate of 10c per dozen extra.

Six of a kind at dozen, rate; 25 at 100 rate; 250 at 1000 rate.

Before completing your order see second cover page. For other bulbs see pages 106 and 107.

FACTS ABOUT GLADIOLI.

Gladioli thrive throughout the northern and central states. They are the best of all summer flowering bulbs.

One cannot guarantee a crop of any flowers, since they are all subject to uncontrollable weather conditions, but there is no flower more certain to do well than the Gladiolus.

Few garden flowers last longer after being cut.

They are fine for the children's garden since they are of so easy culture.

Gladiolus bulbs are easily cared for over winter, if the directions on the opposite page are followed. Then they may be planted out the following year and will continue to increase annually.

Plant Gladioli this spring if you want beautiful flowers next summer.

They bloom from midsummer until frost if planted at intervals.

Gladioli appear best in masses of twenty-five or more of one color.

For early flowers start the bulbs indoors in March or April and transplant to the garden in late May.

Plant Gladioli by the hundreds and thousands this year. The initial cost is less than ever before and the expense of growing them slight. Create a demand in your neighborhood and the returns will be tenfold.

Contrast.

One of the most strikingly beautiful Gladioli ever brought out. The flowers are of great substance and form a compact spike of perfect shape. The color is intense scarlet with large, pure white center which is neither tinted nor mottled. Each, 40c; doz., \$4.00; 100, \$30.00.



Gladiolus Contrast.



Paeony-Flowered Dahlia—Dr. H. H. Rusby.

Northrup, King & Co.'s BEAUTIFUL DAHLIAS

See next page for other varieties.

Illustrations are much reduced in size.

These plants are so well and favorably known as to require no description. No garden is complete without some of these handsome, double flowers. The Dahlia is a wonderful flower and rivals in popularity any other flower in existence.

Culture. Start the tubers indoors in April, placing them in shallow boxes of dirt or manure. These can be kept in a cellar or outhouse until late May or early June when the plants should be transplanted outdoors. Plant in an open sunny situation; 3x3 feet is about the proper distance apart to plant. Prepare the soil thoroughly by digging. Be moderate in the use of both manure and water. Never plant when soil is wet. Lay the tuber flat on its side and cover it 4 inches deep, pressing the soil firmly on the tuber. Keep the soil loose and mellow by frequent hoeing, drawing the soil to a slight hillock around the plant. It is also advisable to use a mulch of straw or grass clippings around the plants to keep the soil from drying out. It is not well to water the plants except just enough to insure the soil being moist.

Tall growing varieties may be kept fairly dwarf by pinching out the tip when the first shoot is 6 inches high. All varieties growing above 4 feet should be tied to stout stakes to hold them in position. Keep all dead flowers trimmed off.

Dahlia blooms keep much better if cut in the evening—about sunset—and the less foliage taken off with the flowers the better for both plant and flower. If green is desired, use some other green of better keeping qualities.

After frost has killed the tops, dig the tubers carefully leaving 6 inches of the main stem on every clump, taking up with them all the soil which adheres to the roots, and store away in a box or barrel secure from frost. As a precaution it would be well to cover the tubers so stored with sand, leaves or moss.

All clumps should be divided into several pieces before being reset each spring. In doing this it is necessary to split the main stem, leaving a section of this on each tuber.

Delivery April to July first. Order early so you can start your plants indoors, as suggested above. Strong tubers, postpaid at single prices.

Paeony-Flowered Dahlias.

This is one of the newer types; it is known also as the Art Dahlia. The flowers resemble the semi-double Paeonies in general form, with irregular and twisted petals. They all flower very freely, making excellent varieties for cutting and garden decoration.

Cleopatra. Oriental red, base of petals yellow, shading to bronze red; very showy.

Each, 35c.

Dr. H. H. Rusby. Very large, often 6 inches in diameter, an early and constant bloomer, producing its immense, bright lemon flowers in profusion. Plant vigorous and healthy, extra fine. See illustration above. Each, 50c.

Geisha. The showiest and most attractive of this type yet introduced. Petals very long, curved and twisted. A rich combination of scarlet and gold, shaded to amber yellow. A queen among Dahlias. Each, 50c.

Queen Wilhelmina. Immense, fluffy flower of pure white, with yellow center. Each, 35c.

Souvenir Franz Liszt. Dark purple, maroon. Veined and shaded with white. Flowers very large and stems long. Very good. Each, 35c.

Village Belle. Very large. Color rich amber, heavily shaded with cherry. Long, erect stems. A fine variety. Each, 35c.

DAHLIAS OF SPECIAL MERIT

Various Types.

Prices. All Dahlias priced at 20c each are \$2.00 per dozen; at 25c each, \$2.50 per dozen.

Aurora. (Cactus.) Soft pink, tinted white, with gold shading, very free bloomer. Height, 3 feet. Each, 25c.

Autumn Glow. (Decorative.) A very large, full flower, blooming well above the foliage. Color, bronze yellow, giving varied autumn tints. Height, 4 feet. Each, 25c.

Charles Clayton. (Cactus.) It is the ideal in color, form, length of stem and general good habits. Stems are long, throwing the flowers well above the foliage. The color is a most intense red, so vivid as to dazzle the eye. Flowers are large in size and are produced freely. Plant grows to a height of 4 feet. Each, 25c.

Charm. (Cactus.) Petals long and regular, delicate salmon rose, changing to pale pink; often pink edged with salmon rose. Height, 3 feet. Each, 25c.

Congo. A decorative form. A dark, velvety maroon color. Produced on long, erect stems. Each, 20c.

Cornucopia. (Cactus.) A superb variety; petals very long and regular in form. Deep vermilion, shading darker. Flowers large. Height, 3 feet.

Corona. (The Carnation Dahlia.) A miniature decorative form, fully double and of the purest white. Its wonderful freedom of bloom, and pure color place it at once at the head of the list as a florist's flower. It resembles a carnation, both in size and form. Each, 25c.

Countess of Lonsdale. The freest-flowering Cactus Dahlia in the collection, and perfect in form. Color, an exquisite shade of rich salmon, with just a suspicion of apricot at the base of the petals. Towards the tips the color deepens gradually to the softest carmine pink. Height, 3 feet. Each, 20c.

Country Girl. (Cactus.) Base of petals golden yellow suffused with salmon rose, a bright and pleasant combination of color, difficult to describe. Flowers are very large and perfect in form. A very fine Dahlia. Height, 3½ feet. Each, 20c.

Dainty. (Cactus.) The dainty coloring baffles description, but may be partly described as a lemon base, shading to an exquisite rosy pink at the tips. Height, 4 feet. Each, 20c.

D. M. Moore. (Show.) A flower of mammoth size, produced in profusion on long, stiff stems. Its color is a deep, velvety maroon. It has no equal in its color. Height, 3 feet. Each, 25c.

Dreer's White. (Show.) Pure white. Height, 3 feet. Each, 25c.

Evelyn Wilmore. (Cactus.) Deep garnet red without shading or variation; petals long and narrow, curving forward. Flower medium in size. Stems long and erect. Height, 4 feet. Each, 25c.

Gaity. (Fancy.) Vivid scarlet, heavily marked with pure white. Stems are long and flowers are produced freely. Height, 3 feet. Each, 20c.

Gold of Ophir. Flowers extra large of the decorative form and very full. Height, 4 feet. Each, 25c.

Grand Duke Alexis. (Show.) A magnificent Dahlia of the largest size. Its petals are beautifully quilled, giving it a very unique appearance. Its color is pure white, if slightly shaded, but overspread with delicate lavender when grown in bright sunlight. Each, 20c.

Ingeborg Egeland. (Cactus.) A strong grower with bright green foliage, presenting a picture of wonderful richness when combined with the large mass of deep scarlet blooms. Flowers are borne well above the foliage on strong, medium length stems. Each, 25c.

Jack Rose. (Decorative.) The valuable features are so many that no doubt it will become the ideal Dahlia for cut-blooms in the future. In form it is that of an open flat rose, but always well filled in the center. Size of bloom from 5 to 6 inches; height of stem for each individual bloom, 2 feet and over. Exceedingly free-blooming and has the best lasting qualities after being cut of any variety we know of. Flowers properly treated will last from 10 to 12 days. Each, 20c.

Jeanne Charmet. A decorative variety of exquisite form and color. Flowers are very large and stems exceptionally long. Color, a shading of pink lilac, each petal edged with white. Height, 4 feet. Each, 25c.

J. H. Jackson. (Cactus.) A tall growing variety, producing its finely formed flowers on long stems. Color, brilliant crimson maroon.

Kriemhilde. An exquisite, delicate shell-pink shading to white in the center; undoubtedly the finest and most perfect pink Cactus Dahlia to date. Each, 20c.

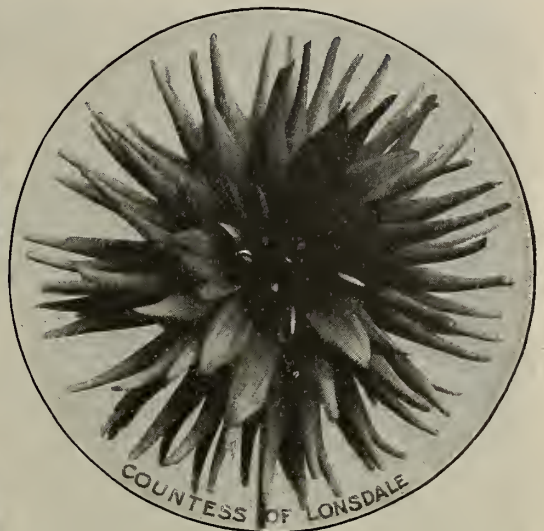
Manitou. (Decorative.) Flowers are even in outline and always full to the center. Immense size—often eight inches in diameter. The color is pleasing, being an amber bronze with a distinct shading of pink. Not suitable for cutting. Height, 4 feet. Each, 25c.

Manzanita. (Show.) Clear, rich lavender, the purest of its color yet introduced. Stems are long and rigid. Fine for cutting. Height, 5 feet. Each, 25c.

Manzanola. In this new decorative Dahlia we have one of the most intense vivid reds of the Dahlia family. Flowers are large and finely formed, showing well above the foliage. Height, 4 feet. Each, 20c.

Mikado. (Cactus.) Bright crimson, large and full; petals long and pointed. An early and free bloomer. Height, 3 feet. Each, 25c.

Mme. Dael. (Mad. Van Den Dael.) An immense decorative Dahlia that has proven a favorite with all and is justly entitled to first place among all the shell pinks. It is very large, yet chaste in form. Stems are exceptionally long and wiry, bringing the immense flowers above the foliage. Color, soft shell pink. A noble Dahlia. Height, 4 feet. Each, 25c.

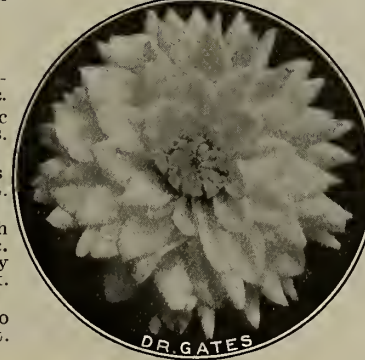
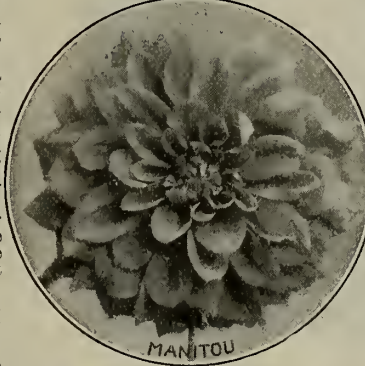


DAHLIAS OF SPECIAL MERIT CONTINUED.

- Mme. A. Lumier.** (Decorative.) Ground color white, suffused towards the ends of the petals with red. Tips pointed with bright violet-red. 3 feet. Each, 25c.
- Mrs. Ferdinand Jeffries.** Probably the largest Cactus Dahlia ever grown. The long petals are curved and twisted. Color, deep velvety red. Each, 25c.
- Mrs. H. J. Jones.** (Cactus.) A large Dahlia with long claw-like petals curving forward. Color, bright vivid red, tipped and edged with pure white. Sometimes solid red, at others bluish white. Each, 20c.
- Mrs. Hannah Muir.** Salmon pink, sometimes marked with white. Petals long and curved, drawing to a sharp point. Height, 4 feet. Each, 20c.
- Mrs. Winters.** (Decorative.) This superb, white Dahlia is now so favorably known that an extensive description is not necessary. Height, 3 feet. Each, 20c.
- Mrs. W. K. Jewett.** (Cactus.) A large, finely formed flower, combining all qualities of a first-class Dahlia. Petals long and narrow, curving forward and irregular in formation, giving a claw-like effect to the flower. Color a pleasing orange scarlet. Very long stems, making it fine for cutting. Height, 4 feet. Each, 25c.
- Navajo.** For richness of color this new decorative Dahlia has no equal. Its bold, rich flowers are the admiration of all. A most intense red, with violet shading. Height, 4 feet. Each, 20c.
- Olive Tracy.** (Cactus.) Clear canary yellow. Produced on long stems, making it a valuable variety for cutting. A very attractive flower. Each, 25c.
- Princess Yvette.** (Cactus.) Delicate pink shading to amber. Flower is medium in size. Each, 25c.
- Prof. Zacharias.** (Cactus.) Clear, lemon yellow petals, long and straight. Height, 4 feet. Each, 20c.
- Rev. D. R. Williamson.** (Cactus.) Dark purple maroon. Very large and of exquisite form. Stems very long, fine in all points. Each, 25c.
- Souvenir Douzon.** (Decorative.) An immense flower with broad flat petals and full to the center. This is the best red in the decorative section. Each, 20c.
- Umatilla.** (Decorative.) Another grand Dahlia; remarkably long stems and splendid keeping qualities. Color, deep blood red with neither shading nor variation. Height, 5 feet. Each, 25c.
- Uncle Tom.** (Cactus.) Dark maroon, almost approaching black. Fine flower with good stem. Each, 20c.
- Victor Von Scheffel.** (Cactus.) This new introduction is similar in both form and color to the well-known Kriemhilde, but is freer of bloom and more delicate in color. Shell pink shading to white. 4 ft. Each, 20c.
- Ventura.** (Cactus.) Yellow shading to amber and pink. A very free bloomer. Stem rather short, but in all other respects first-class. Each, 25c.

Five Fine Single Dahlias.

- Lady Love.** A fine single; long stems. Light canary yellow, shaded to pure white. Height, 4 feet. Each, 20c.
- Pres. Viger.** (Collarette.) Carmine red, yellow disc surrounded by a frill of pure white miniature petals. Very attractive. Height, 3 feet. Each, 20c.
- Scarlet Century.** Bright, vivid scarlet on very long stems petals broad and evenly arranged. Height, 5 feet. Strong tubers, each, 20c.
- Twentieth Century.** Intense rosy-crimson tipped with white and having a white band around the disc. As the season advances they become lighter until they are almost a pure white suffused with soft pink. Height, 5 feet. Strong tubers, each, 20c.
- White Century.** Similar to the foregoing, except as to color, which is of the purest white. Height, 4 feet. Strong tubers, each, 20c.



Standard Cactus Dahlias.

- This class embraces the long, narrow petaled varieties, the petals of which are generally pointed or twisted. Strong tubers, each, 15c, postpaid.
- Earl of Pembroke.** Deep purple maroon, fine form. 3 ft.
- Floradora.** A marvel of productiveness and of exquisite form. Deep blood-red, very early. Height, 3 feet.
- Gypsy Maid.** Orange scarlet; petals long and pointed. Exquisite finish. Height, 3 feet.
- Harbor Light.** 3 feet. A handsome variety, with large, fine form; petals long and narrow, dark red with shading of apricot in the center of the petals.
- Mrs. Chas. Turner.** Extra large, with long, pointed petals and perfect form. Bright yellow. Height, 3 feet.
- Mrs. Alvord.** A fine salmon pink with long regular petals.
- Mrs. Bennet.** Soft crimson, large and well formed, petals broad and pointed. Height, 4 feet.
- Mrs. Peart.** A delicate creamy white. Height, 5 feet.
- Prince of Orange.** A beautiful true Cactus form. In color, a blending of apricot, orange and bronze. 3 feet.
- Standard Bearer.** Rich fiery scarlet, one of the very best.
- Zephyr.** A light feathery cactus form of unique coloring, rosy pink shading to heliotrope. Height, 3 feet.

Standard Decorative Dahlias.

- This class is an intermediate form. Broad, flat petals. Strong tubers, each, 15c, postpaid.
- Creole.** Clear amber, large and full; good habit. 4 feet.
- Dr. Gates.** Beautiful shell pink, shading to bluish at base of petals, stems long. Height, 5 feet.
- Eugene Teele.** A very fine deep scarlet. Height, 5 ft.
- Grand Mogul.** Scarlet tipped and streaked pure white. Height, 4 feet.
- Mrs. Hartong.** Color, light fawn, suffused with pink.

Show and Fancy Dahlias.

- The name "Show" applies to varieties producing large, well formed flowers, having only solid colors, but may frequently have shaded tips. "Fancy" embraces all the variegated. Strong tubers, each, 15c, postpaid.
- Annie Moore.** A fine variegated flower of medium size. Color, a combination of cherry pink and white. 3 ft.
- A. D. Livoni.** Rich pink. Finely formed. 3 feet.
- Bon Ton.** A fine ball-shaped flower of a deep garnet red. Extra fine. Height, 4 feet.
- Frank Smith.** Rich dark maroon; sometimes tipped with pure white, shaded into pink. Height, 5 feet.
- Glori de Lyon.** Pure white. The largest white Dahlia.
- Kate Haslam.** A beautiful soft pink. Petals quilled. 3 ft.
- Lady Mildmay.** A very beautiful flower. White ground shaded to pale lilac. Very large and full.
- Lucy Fawcett.** Sulphur yellow; streaked and flecked with crimson, fine. Height, 5 feet.
- Purple Gem.** Rich royal purple, clear and constant. A decided improvement over the old varieties. 4 ft.
- Snow.** A beautiful pure white, long stem. Excellent.
- Salmon Queen.** Buff salmon, rounded and full. 4 feet.
- The Baron.** A strong, robust grower. Flowers bright yellow, sometimes tipped with white, stems long.

Pompon or Bouquet Dahlias.

- This class embraces the small round Dahlias, the plants of which are generally of a dwarf, bushy habit. Strong tubers, each, 15c, postpaid.
- Bacchus.** Clear bright red. Rounded and full. 4 feet.
- Cochineal Rose.** Deep cochineal red, of perfect form.
- Catherine.** Bright yellow. Good form and stem. 3 ft.
- Darkness.** Very dark maroon. Extra fine. 3 feet.
- Pure Love.** Beautiful lilac. Height, 4 feet.
- Star of the East.** Purest white. Very free bloomer and excellent for cutting. Height, 3 feet.

Cottage Garden Collection.

A collection of 13 varieties, all different, but not named. Unusual value, when names are unimportant, but sure to please in variety of type and color. \$1.50 postpaid, or at our Store for \$1.25.



TUBEROUS ROOTED BEGONIAS

For showy lawn beds and borders we know of no flower that equals the Tuberous Rooted Begonia in ease of culture, brilliancy of bloom, beauty and attractiveness of foliage. The flowers are from 5 to 7 inches in diameter; the plants grow about twelve inches in height, bloom from early summer until time of frost, and fairly blaze with their gorgeous coloring of crimson, rose, yellow, scarlet, white and orange.

Tuberous Rooted Begonias are adapted not only for bedding and window box decoration, but for indoor blooming in pots. In addition to their great and striking beauty, they have the additional merit of being very reasonable in price, especially the single sorts, which on this account, as well as for their beauty, are particularly recommended for planting on a liberal scale where striking color effect is desired.

The value of Tuberous Rooted Begonias is becoming more appreciated each season. They are easily cultivated, not likely to be attacked by insects or blight, and succeed in any good soil which is kept moderately moist. The tubers may be started in March, either singly in small pots or set two inches apart in flat boxes. The soil should be light containing plenty of leaf mold and sand. In planting, care should be taken to set the crown of the tuber, which is usually somewhat depressed, upward. The tubers should be covered one-half inch with light soil and watered sparingly until they start, after which more water may be given. The temperature should be 60 to 70 degrees. The started plants may be transplanted to the beds in open ground early in June, at which time they should be in bloom. They may also be started in the open ground at the approach of warm weather with very good results. They will thrive either in full sunlight or partially shaded places, but when exposed to the sun they must be kept moist.

Postpaid at single and dozen prices; larger quantities by express at purchaser's expense.

We offer Frilled, Single, Double and Crested Begonias at the strikingly low prices below named. Our bulbs are the largest size produced and have been imported in large quantities from the best growers of Europe.

SINGLE VARIETIES.

Single Yellow.	Single White.	Single Rose.
Single Crimson.	Single Scarlet.	Single Orange.
Prices, any of the above, each, 5c; doz., 50c; 50, \$1.75; 100, \$3.50; 500, \$15.00; 1000, \$30.00.		
Single Mixed. Embracing all the above colors. Each, 5c; doz., 45c; 50, \$1.50; 100, \$3.00; 500, \$14.00; 1000, \$27.50.		

DOUBLE VARIETIES.

Double Yellow.	Double White.	Double Rose.
Double Crimson.	Double Scarlet.	Double Orange.
Prices, any color in double, each, 10c; doz., 85c; 50, \$3.00; 100, \$6.00.		
Double Mixed. Embracing all six colors mentioned above. Each, 10c; doz., 75c; 50, \$2.75; 100, \$5.50.		

FRILLED VARIETIES.

Frilled Yellow.	Frilled White.	Frilled Rose.
Frilled Crimson.	Frilled Scarlet.	Frilled Orange.
Prices, Frilled Begonias, any color named, each, 10c; doz., 85c; 50, \$3.00; 100, \$6.00.		
Frilled Mixed. All colors mixed, each, 10c; doz., 75c.		

CRESTED VARIETIES.

Crested Yellow.	Crested White.	Crested Rose.
Crested Crimson.	Crested Scarlet.	Crested Orange.
Prices, Crested Begonias, any color named, each, 25c; doz., \$2.50.		

VEGETABLE PLANTS AND ROOTS.

All of our Vegetable Plants are hardy and carefully transplanted stock and must not be confused with the regular bed plants, which will endure less shipping and will not produce such strong, healthy plants as the transplanted stock.

Packing charges are included in the prices given, except as noted, but purchaser must pay transportation in every instance. Plants of all kinds should invariably be sent by express, as they will arrive at destination in less time than if sent by freight and will also be given better care in transit. On all orders for Vegetable Plants amounting to less than \$1.00 add 15c to cover packing charges.

Asparagus Roots. See page 6.

Cabbage, Early. Ready about April 15th. Early Jersey Wakefield, Early Summer, Succession and Premium Late Flat Dutch. 1000, \$6.00; 100, 75c; doz., 15c.

Cabbage, Late. Ready about May 20th. Holland, Premium Late Flat Dutch, Washington Wakefield, Succession and Early Summer. 1000, \$5.00; 100, 65c; doz., 15c.

Cabbage, Late. June delivery. Holland or Dutch Winter and Flat Dutch. 1000, \$3.00; 100, 50c; doz., 10c.

Cauliflower, Early. Ready about April 20th. Northrup, King & Co.'s Model and Snow Ball. 1000, \$8.00; 100, \$1.00; doz., 20c.

Cauliflower, Second Early. Ready about May 20th. Northrup, King & Co.'s Model and Snowball. 1000, \$6.00; 100, 75c; doz., 15c.

Celery, Early. Delivery about June 15th. Golden Heart, White Plume and Golden Self Blanching. 1000, \$6.00; 500, \$3.50; 250, \$1.75; 100, \$1.00; doz., 15c.

Celery, Late. Delivery after June 15th. Giant Pascal and Winter Queen. 1000, \$6.00; 500, \$3.50; 250, \$1.75; 100, \$1.00; doz., 15c.

Chives. Ready April 25th. Doz. bunches, \$1.00; each bunch, 15c.

Egg Plant. Ready June 1st. Northrup, King & Co.'s Improved New York Spineless. Doz., 50c; each, 5c.

Garlic. See page 27.

Ground Cherry, or Golden Husk Tomato. Ready May 15th. Doz., 25c.

Horse Radish Roots, Common. Two year old, strong roots. 1000, \$6.00; 100, 75c; doz., 15c, (postpaid, 20c).

Horse Radish Roots, New Bohemian or Maliner Kren. Root cuttings planted in April will produce fine large roots in October, five months from

planting. White as snow, free from disease. 1000, \$8.00; 100, \$1.00; doz., 20c, (postpaid, 25c).

Mint Roots. 100, \$1.50; doz., 25c.

Onion Sets. All varieties. See page 36.

Pepper. Ready by June 1st. Ruby King and Large Bell or Bull Nose. 100, \$2.00; doz., 25c.

Rhubarb Roots.

See page 48.

Sweet Potato.

Ready by May 20th. Yellow Jersey and Red Jersey. 1000, \$7.50; 100, \$1.00; doz., 25c.

Tomato, Early.

Ready May 1st. Early Minnesota, Earliana and June Pink. Hardy, transplanted stock. 1000, \$10.00; 500, \$5.00; 250, \$2.50; 100, \$1.25; doz., 25c.

Tomato, Late.

Ready May 15. Sterling, Dwarf Champion, Beauty, Livingston's Globe, Ponderosa, Golden Queen, Yellow Pear, Red Pear. Extra strong, hardy, transplanted plants. 1000, \$6.00; 500, \$3.00; 250, \$1.75; 100, \$1.00; basket, 1 doz., 25c.

Orders for plants and roots listed on this page may be sent at any time, the earlier the better.



A Basket of Hardy, Well Grown Tomato Plants.



An artistic and well arranged bed of Cannas and other Bedding Plants.

FLOWERING PLANTS

For Bedding, Window Boxes and Vases.

Packing charges are included in prices given, but purchaser must pay transportation in every instance. Plants of all kinds should invariably be sent by express, as they will arrive at destination in less time than if sent by freight and will also be given better care and attention in transit. All sorts priced at \$1.00 or less a doz., 10c each; at \$1.50 a doz., 15c each; at \$2.00 a doz., 20c each. Delivery from May to early July.

BEDDING PLANTS.

For Terms and Delivery see above.

	Each.	Doz.
Achyranthes. Red, green and variegated	\$.10	\$.75
Ageratum. A fine border plant		.25
Ageratum. 2 inch pots	.10	.75
Alternanthera. Red and green		.50
Alyssum. Sweet. 2 inch pots	.05	.50
Asters. Mixed colors		.25
Asters. Mixed colors in 2 to 2½ inch pots		.50
Begonia. Tuberous Rooted. Single, 6 colors, 4 in. pots	.20	2.00
Begonia. Tuberous Rooted. Double, 6 colors, 4 in. pots	.25	2.50
Begonia. Vernon, for border, 3 inch pots	.10	1.00
Begonia. Rex	.35	3.50
Candytuft		.25
Carnations, Marguerite		.25
Castor Beans. Ricinus	.15	1.50
Cobaea Scandens. Blue or white	.25	2.50
Coleus, golden, green, red and variegated	.10	.75
Daisy, English. Mixed		.25
Daisy, Marguerite 4 in. pots	.15	1.50
Daisy. Mrs. Sander	.30	3.25
Daisy, Shasta	.25	2.50
Dracaena Indivisa	1.00	
Dusty Miller. Cut leaved or smooth leaved	.05	.50
Echeveria. Old Hen and Chickens	.10	1.00
Ferns, Asparagus Plumosus. 4 inch pots	.25 to .35	
Ferns, Asparagus Sprengeri	.35 to .50	
Ferns, Boston	.25-.50-1.00	
Ferns, Small, in pots	.10	1.00
Feverfew. Double pure white flowers	.20	2.00
For-get-me-nots. In pots	.10	.75
Golden Feverfew. Pyrethrum Aureum	.10	.75
Hanging Baskets. Artistically filled with ferns and Summer Plants	3.00 to 5.00	
Heliotrope. 3 inch pots	.20	2.00
Hollyhocks. Mixed colors	.25	2.50
Hydrangea. See page 86		
Lobelia. In pots	.10	.75
Marigolds, French, in pots	.10	.75
Pansies. Mixed colors. 25, \$1.00; 50, \$1.75; 100, \$3.50		.50
Petunias. Single and double, 4 inch pots	.15	1.50
Roses. See pages 89 and 90. Baby Rambler, in pots	.50	5.00
Salvia. In 3 inch pots	.10	1.00
Salvia. In 3½ inch pots	.15	1.50
Sweet William	.20	2.00
Verbenas	.10	1.00
Vincas. Green leaved	.35	3.50
Vincas. Variegated leaved	.25	2.50
Vincas. Variegated leaved, second size	.20	2.00
Zinnias. Mixed colors		.25

See page 104 for Cannas and page 86 for Phlox.

Book on Flowers and How to Grow Them. By Eben E. Rexford. Very interesting and profitable. Price, 50c, (postpaid, 55c).

PLANTS REQUIRED TO FILL A CIRCULAR BED.

DIAMETER	6 IN. APART	12 IN. APART	18 IN. APART
3 feet	28	7	
4 feet	48	12	6
5 feet	80	20	8
6 feet	112	28	13
7 feet	152	38	17
8 feet	200	50	23
9 feet	256	64	28
10 feet	320	80	36

GERANIUMS.

3 or 4 inch pots.

	Each	Doz.	100.
Alphonse Ricard. Semi-double, vermillion scarlet	\$.20	\$2.00	\$15.00
Beaute Poitevine. Semi-double salmon	.20	2.00	15.00
Jean Viaud. Semi-double rose-pink	.20	2.00	15.00
Mme Buchner. Double snow white	.20	2.00	15.00
S. A. Nutt. Double crimson-scarlet	.20	2.00	15.00
Lemon Scented	.25	2.50	20.00
Rose Scented	.25	2.50	20.00
Silver Leaf. 2½ inch pots	.15	1.50	10.00
Ivy Leaved.	.25	2.50	20.00

MIXED GERANIUMS.

All Colors.

First Size. Selected	.20	2.00	15.00
Second Size	.15	1.50	10.00
Book on Home Floriculture. By O. N. Page. Goes into detail and gives the information you want. Paper covers, 25c, postpaid.			



Salvia, Showing Plant in Full Bloom.

Northrup, King & Co.'s Large Flowering Cannas.

The varieties of Cannas which we offer are particularly adapted to the Northwest and are sure to give satisfaction. The plants are hardy-grown—the roots being started in a cool greenhouse in January and the plants grown slowly, until they are large enough to go into $3\frac{1}{2}$ or $4\frac{1}{2}$ inch pots.

Very effective for bedding on the lawn, and equally good when grown as pot plants in the house or conservatory. They commence blooming soon after being planted out and flower profusely until stopped by frost. They require a deep soil, enriched with well rotted manure and bone meal. Mulch with hay or grass clippings and water freely. Our list embraces the best of the novelties and old standard varieties. Delivered from May 15th to June 15th, strong plants from 4-inch pots, which will commence to bloom in a short time.

Price. All Cannas except Firebird, Julius Koch and Mixed varieties, each, 20c; doz., \$2.00; 100, \$15.00, by express only at purchaser's expense. Six at doz. rate, 25 or 50 at 100 rate.

Canna Firebird. This is by all means the very best red-flowered, green-leaved Canna, supreme among orchid flowering varieties.

The flowers are borne in immense trusses, on strong stalks well above the leaves. They are of splendid form, round and shapely. The petals measure $2\frac{1}{2}$ inches and more across. The color is a clear glistening scarlet without any streaks, spots or blotches.

Firebird has been very much admired whenever exhibited. At the Minneapolis Flower Show, visitors stopped instantly when they perceived the dazzling red blossoms. The color, so pure and clear, is really fascinating; a self color not hitherto seen in Cannas. Each, \$1.00; doz., \$10.00.

Red Flowering, Green Foliage Cannas.

Alphonse Bouvier. Flowers very large, clear crimson in large clusters; a grand variety for bedding, luxuriant green foliage. Height, $5\frac{1}{2}$ feet.

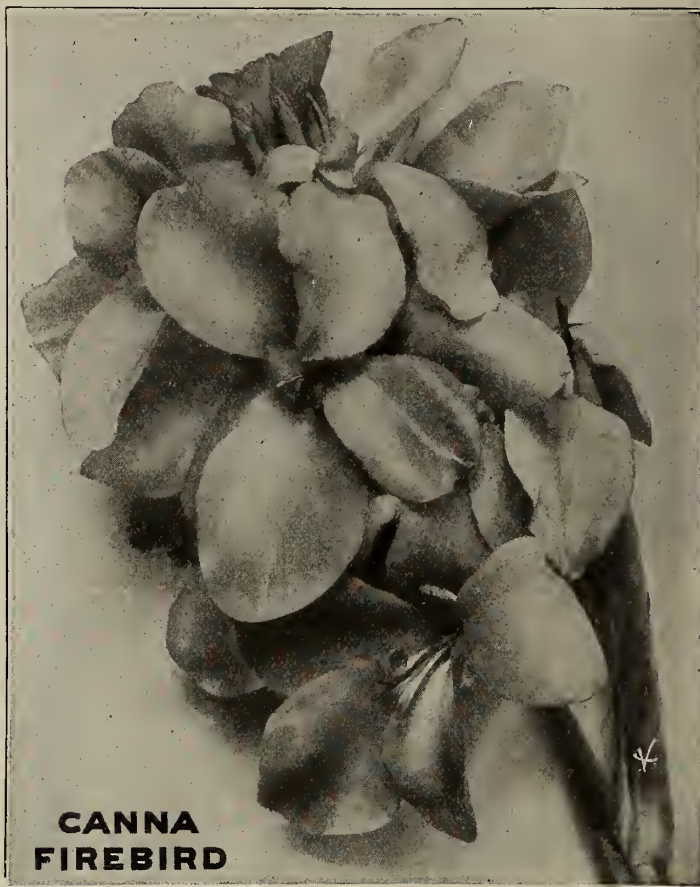
Duke of Marlborough. Flowers rich, velvety crimson; fine, shapely flowers in large, full trusses. Used in great quantities by landscape architects. Height, four feet.

J. D. Eisele. Brilliant vermilion scarlet, very striking. A fine bedder. Height, 5 feet.

Julius Koch. Flowers composed of four, broad, well rounded, large petals which are of the most brilliant, blood red. A very beautiful variety. Height, 3 feet. Each, 25c; doz., \$2.50.

Louisiana. A strong, vigorous variety, producing a dense mass of glossy, green foliage and vivid scarlet flowers, often measuring 7 inches across. Height, 6 feet.

Pillar of Fire. The giant of its class; flowers bright crimson-scarlet, borne in erect spikes. It is a continuous bloomer and invaluable for the center of beds or for entire beds. Height, 5 to 6 feet.



**CANNA
FIREBIRD**

Firebird—the Best Red Canna.

Red Flowering, Bronze Leaved.

King Humbert. Gigantic trusses of orange-scarlet flowers with bright red markings make a splendid contrast with the dark, bronze foliage. The flowers are 6 inches in diameter and of very fine shape, typical of the orchid flowering class. Height, 5 feet.

Orange Shaded, Green Foliage.

Pennsylvania. Intense, vermilion-scarlet, overlaid with an orange sheen; foliage, rich green. A splendid orchid-flowered variety. Height, 5 ft.

Red Flowering, Gold-Edged Cannas.

Madame Crozy. Flowers brilliant vermilion scarlet with narrow gilt edge, a very popular variety. Foliage bright green. Height, $3\frac{1}{2}$ feet.

Souvenir d' A. Crozy. Green foliage. Rich crimson-scarlet edged with golden-yellow. Effective for bordering other Cannas. Height, 3 ft.

Yellow Flowering, Green Foliage.

Gustav Gumpper. The ideal, rich yellow, bedding Canna. The large flowers are borne well above the foliage; its habit of growth is neat and uniform. The color supplies a shade which has heretofore been missing, a clear golden yellow. Height, $3\frac{1}{2}$ to 4 feet.

Richard Wallace. A pleasing canary yellow, with extra large flowers which are carried well above the green foliage in upright, well branched trusses. Height, $4\frac{1}{2}$ feet.

Pink Flowering, Green Foliage.

L. Patry. Flowers of delicate rose pink, standing well above the handsome, green foliage. Height, $4\frac{1}{2}$ feet.

Mixed Cannas For Bedding.

A mixture of the finest dwarf, large flowering kinds, which will go well together, and make a magnificent bed or border of bright colors. We can thoroughly recommend this mixture. We do not care to plant out any Cannas on our own grounds and we therefore, make this special offer to close out our stock for delivery June 1st to 10th. Each, 15c; doz., \$1.75; 100, \$12.00; six at dozen rate; 25 at 100 rate.

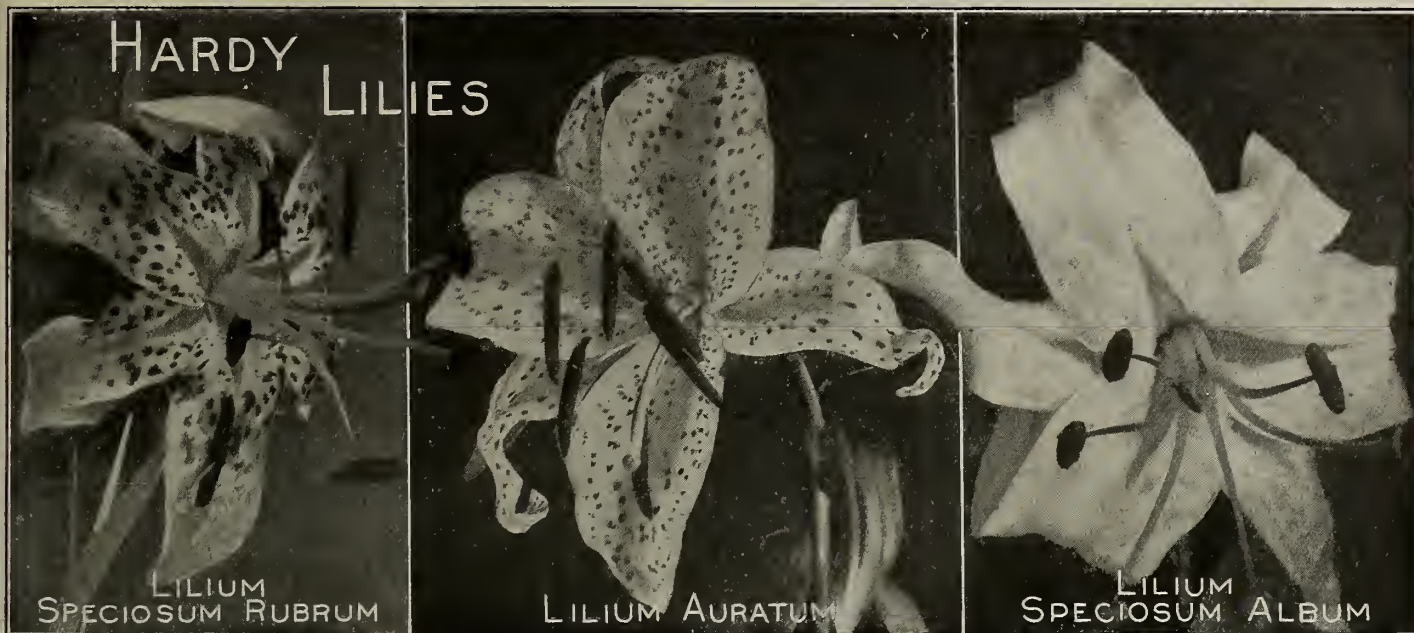
Circular Beds. Arrange Cannas thus: In center 1 plant; 1st circle, 6 plants; 2d circle, 12 plants; 3d circle, 18 plants; 4th circle, 24 plants, each circle taking 6 more, plants to be set 18 inches apart.

Fall and Winter Treatment. Do not lift plants until after a sharp frost, then take up with as much soil as possible, being careful not to break or damage the roots. Cut off half the tops and store in shed or cellar. When the remaining foliage becomes perfectly dry it may be cut off to a height of 3 inches, then the roots, still with the dirt on them, should be stored where the temperature will be from 40 to 45 degrees. The roots should never be allowed to freeze nor entirely dry up. The roots may be placed on a rack or even on a dry cellar floor. Cover with a layer of straw to hold the moisture. In January or February clean the roots, divide up into pieces with 3 or 4 eyes each and start in flats or pots in house or conservatory.

We do not advise planting Cannas or other bedding plants outdoors, in this latitude, much before Memorial Day.



Cannas produce an elegant tropical effect.



The Speciosum or Lancifolium varieties form the most popular class of Japanese Lilies, their hardiness, free growth, and branching habit rendering them most valuable for permanent beds and borders. They grow from 3 to 4 feet in height and continue in bloom from August until frost. See page 71 for Collections of Lilies.

Lilium Auratum. The beautiful gold banded Lily of Japan and one of the grandest plants in cultivation. No species ever had so much general favor. A bed of 100 Auratums will produce flowers over a longer time than any equal number of any other of the lily species. The flowers which are often ten inches across are thickly studded with yellow and crimson spots, while in the center of each petal there is a golden band fading at its edges into the white. Bulbs should be planted as soon as the frost is out of the ground, the earlier the better. Plant in fine, rich well-drained soil. Bulbs, each, 35c; doz., \$3.50. If wanted by mail add 5c each, extra.

Lilium Canadense. WILD YELLOW LILY. Flowers vary in color—red and yellow. Grows 2 to 5 feet high, and is a most hardy species. Nice to plant among shrubbery, and does quite well in shade. June and July. Each, 15c; doz., \$1.50.

Lilium Elegans, Incomparable. Perfectly hardy, succeeds most everywhere; flowers large and showy, pale scarlet. Bulbs, each, 15c; doz., \$1.50.

Lilium Longiflorum. Pure white, trumpet-shaped, flowers in June or July, very hardy. Can also be grown as a pot plant. Bulbs, each, 20c; doz., \$1.75.

Lilium Speciosum Album. Pure white flowers with a greenish band through the center of each petal. They are of great substance and very fragrant. One of the best for general culture. Bulbs, each, 35c; doz., \$3.50. If wanted by mail add 5c each, extra.

Lilium Speciosum Melpomene. Words cannot describe the beauty of this variety. Frosted white, spotted, clouded and bordered with pinkish crimson. Petals deeply recurved and widely bordered. Each, 35c; doz., \$3.50. If wanted by mail add 5c each, extra.

Lilium Speciosum Rubrum or Roseum. No words can overstate the brilliant beauty of these famous Japanese Lilies. The six broad white or pink petals are thickly dotted with rose or crimson spots, while the graceful form and brilliant color make them very effective and desirable. Especially hardy. Each, 35c; doz., \$3.50. By mail, 5c each, extra.

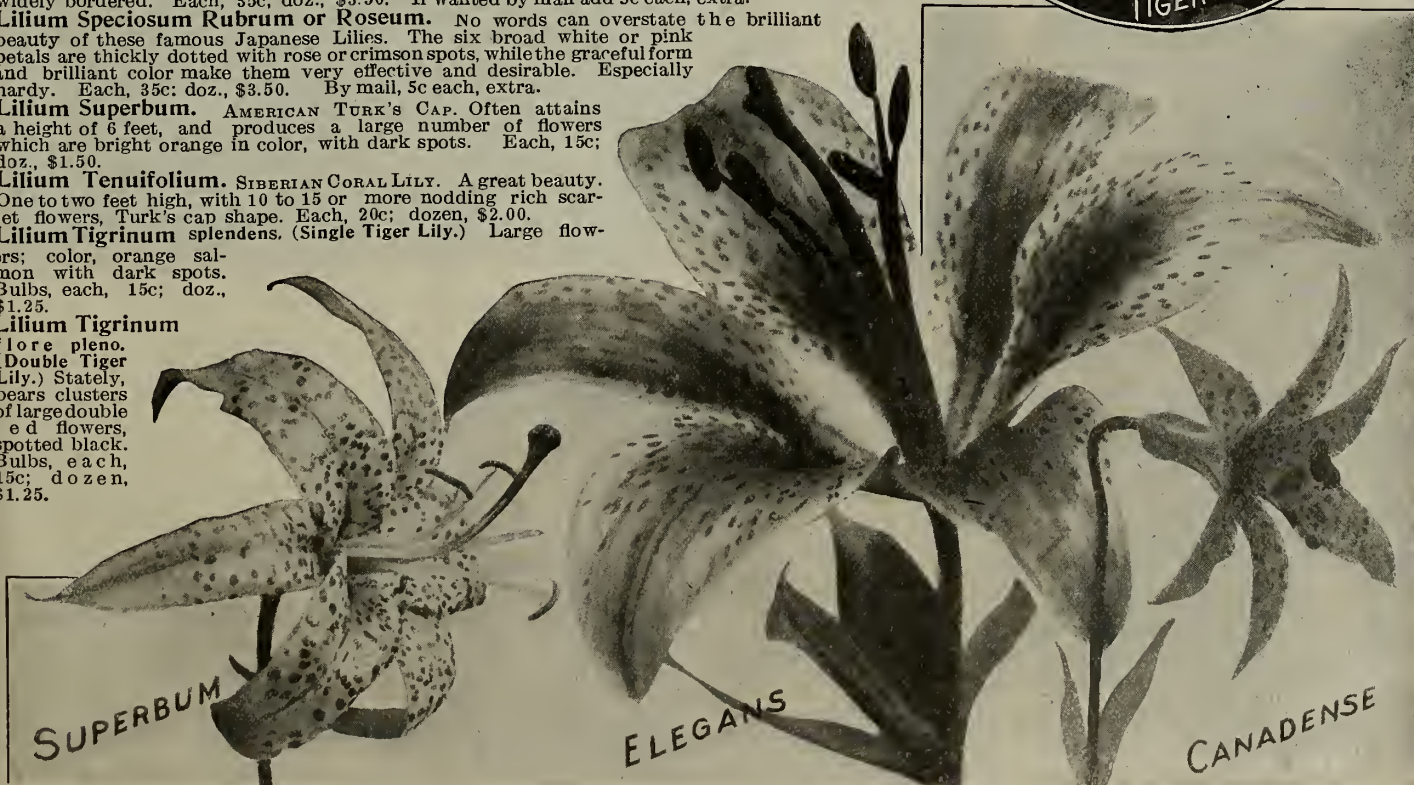
Lilium Superbum. AMERICAN TURK'S CAP. Often attains a height of 6 feet, and produces a large number of flowers which are bright orange in color, with dark spots. Each, 15c; doz., \$1.50.

Lilium Tenuifolium. SIBERIAN CORAL LILY. A great beauty. One to two feet high, with 10 to 15 or more nodding rich scarlet flowers, Turk's cap shape. Each, 20c; dozen, \$2.00.

Lilium Tigrinum splendens. (Single Tiger Lily.) Large flowers; color, orange salmon with dark spots. Bulbs, each, 15c; doz., \$1.25.

Lilium Tigrinum

flore pleno.
(Double Tiger Lily.) Stately, bears clusters of large double red flowers, spotted black. Bulbs, each, 15c; dozen, \$1.25.



WINTER AND SPRING FLOWERING BULBS.

MUST BE PLANTED IN THE FALL. ORDERS FOR BULBS WILL BE FILLED IN OCTOBER.

Our Autumn Catalogue, ready in August, includes a full and complete list of bulbs. Sent to any address on request.

Six bulbs of a kind at the dozen rate; 25 at the 100 rate.

Hyacinths.

Sterling Mixed in Separate Colors for Bedding and Forcing.

If wanted by mail, add for postage, to prices below, 1c per bulb, or 12c per dozen.

Single. Any of the following colors, Rose and Pink, Dark Red, Pure White, Dark Blue, Light Blue or Yellow. Each, 6c; doz., 60c; 100, \$4.00.

Single, all colors mixed. Each, 5c; doz., 50c; 100, \$3.50.

Double. Any of the colors named above. Each, 7c; doz., 65c; 100, \$4.50.

Double, all colors mixed. Each, 6c; doz., 60c; 100, \$4.00.

Sterling Named Hyacinths for Bedding or Forcing.

Extra Selected Bulbs.

Fancy, named varieties in shades of pink, white and deep blue. Each, 8c; doz., 85c; 100, \$6.00. If wanted by mail, add 1c per bulb or 12c per doz., for postage.

Tulips.

Sterling Mixed Early Single for Bedding.

We have taken particular care for years in the handling of our Sterling Mixtures and our customers can depend upon receiving the pick of the crop, unsurpassed for quality and size, and sure to please the most critical. Each, 4c; doz., 40c; 100, \$2.75; 1000, \$25.00. If by mail add 5 cents per dozen for postage.

Extra Fine Single Mixed Tulips.

A very superior mixture of large and brilliantly colored flowers. It is made up of varieties which flower together and grow the same height. Each, 3c; doz., 25c; 100, \$1.50; 1000, \$10.00. If wanted by mail, add 5c per dozen for postage.

Sterling Named Single Tulips for Bedding and Forcing in Pots.

Prices for single bulbs include postage. 25 bulbs and upwards are sent by express at purchaser's expense. If wanted by mail, add 5c per dozen for postage.

D, dwarf; M, medium; T, tall.

Artus. D., early. Bright scarlet, very fine bedding sort. Each, 3c; doz., 20c; 100, \$1.25.

Belle Alliance. D., early. Scarlet, very choice. Each, 5c; doz., 40c; 100, \$2.75.

Cardinal's Hat. M., early. Dark brownish-red. Each, 3c; doz., 25c; 100, \$1.35.

Cottage Maid. D., early. Rose with white flush, a most beautiful variety. Each, 3c; doz., 25c; 100, \$1.50.

Dusart. M., early. Dark scarlet, a large, grand flower. Each, 4c; doz., 40c; 100, \$2.50.

Keizerskroon. T., early. Crimson-scarlet, edged bright yellow; large flower. Each, 4c; doz., 35c; 100, \$2.50.

La Reine. M., very early. White, slightly shaded rose, very good forcer or bedder. Each, 3c; doz., 20c; 100, \$1.25.

Yellow Prince. D., early. Pure yellow, rose-scented. The best yellow for pot culture, beds and borders. Each, 4c; doz., 30c; 100, \$1.75.

Sterling Mixed Double Tulips.

First size bulbs of such varieties as will blossom about the same time and of about the same height. Unequaled for quality and size. Each, 4c; doz., 40c; 100, \$2.75. By mail, dozen, 45c.

Fine Double Mixed Tulips. The colors are blended in proportion and of the same blooming period. Each, 3c; dozen, 25c; 100, \$1.50. By mail, dozen, 30c.

Single Late or May-Flowering Tulips.

Each bloom is a marvel of beauty, growing taller than the ordinary Tulip. Gesneriana Major. A grand Tulip, large, height, 20 inches; color dazzling, crimson scarlet, with vivid blue-black center. Each, 4c; doz., 35c; 100, \$2.50. Picotee. (Maiden's Blush.) Elegant recurving pure white flowers, changing in a few days to a pink edge, gradually becoming suffused with rose. Each, 3c; doz., 30c; 100, \$1.75.

Parrot Tulips. For Open Ground Only. Blooms are of large size; each petal is curiously cut and fringed. The colors are in brilliant shades of crimson and yellow curiously intermingled with blotches of bright green, flowering season is between the early and late varieties. Mixture of all colors, each, 3c; doz., 20c; doz., postpaid, 25c; 100, \$1.25 by express at purchaser's expense.

Sterling Mixed Darwin Tulips.

These come into flower later than the early sorts, filling the gap between spring and summer flowers. They excel in size, brilliancy of color, perfect form and tall, strong stems. All colors mixed, each, 3c; doz., 30c; doz., postpaid, 35c; 100, \$2.00.

In addition to the above, we can also supply Darwins in named varieties of many colors. Each, 6c; doz., 60c; 100, \$4.25. If wanted by mail, add 5c per dozen for postage.

In addition to the above we offer a complete line of Winter and Spring Flowering Bulbs in our Autumn Catalogue, issued in August. Mailed to any address on request. Send for a copy or indicate your desire for it in the space provided for that purpose on our order sheet.



A Bed of Single Tulips and Individual Blossom.

Narcissus, or Daffodils.

These are suitable for garden culture or growing in pots.

Prices on single bulbs include postage; if larger quantities are wanted by mail add at the rate of 10c per dozen for postage.

	Each	Doz.	100
Empress. Perianth white, bright yellow trumpet.	\$ 0.05	\$ 0.45	\$3.00
Emperor. Primrose perianth, full yellow trumpet.	.05	.45	3.00
Golden Spur. Enormous, deep yellow trumpet....	.05	.40	2.75
Orange Phoenix. Double white, orange center....	.05	.35	2.00
Princeps. Trumpet, yellow, sulphur perianth....	.03	.25	1.50
Trumpet Major. Pure yellow, very fine.....	.03	.30	1.75
Von Sion. The old fashioned Double Daffodil. Flowers, deep golden-yellow, large and of fine form.			

Single-nose bulbs. Extra large size. Each, 5c; doz., 45c; 100, \$3.00. Double Yellow Jonquil. Sweet Scented. Flowers in clusters on graceful, slender stems. Each, 5c; doz., 40c; 100, \$2.75.

Single Yellow Jonquil. Sweet Scented. Each, 3c; doz., 15c; 100, \$1.00. Rugulosus Jonquil. The largest Jonquil. Charming rich yellow. Each, 3c; doz., 25c; 100, \$1.25.

Paper White Grandiflora. Flowers are pure white, of great beauty and delicious fragrance. Flowers freely in dense clusters. Most easily grown. Splendid for pots and for growing in dishes filled with water and pebbles. Each, 4c; dozen, 30c; 100, \$2.00.

Poeticus Ornatus. The early flowering Poeticus, splendid, large white flowers in clusters, with saffron cup, margined scarlet. Each, 3c; doz., 20c; doz., postpaid, 25c; 100, \$1.00.

SUMMER FLOWERING BULBS.

Amaryllis.

There are a great many species of Amaryllis, all producing lily-like flowers but, in color varying from the richest crimson and scarlet to pure white and, in size from very delicate blossoms scarcely an inch in diameter to those which measure from six to nine inches.

Amaryllis Formosissima. JACOBÆN LILY. A curious and attractive crimson flower. The flowers are produced before the leaves appear. The bulbs are not hardy but they can be easily preserved during the winter in a dry cellar. Each, 15c, postpaid.

Amaryllis Belladonna Major. These throw up great clusters of beautiful rosy white flowers. They should be planted in well-drained soil, the top being about two inches below the surface. Surround and cover the bulb with sand so as to have some winter protection. Each, 25c, postpaid.

Amaryllis Hallii. Lycoris Squamigera. Produces in early spring attractive green foliage, which grows until July, when it ripens off and apparently dies, but about a month later as if by magic the flower stalks spring from the ground to a height of two or three feet, developing an umbel of large and beautiful lily shaped flowers 3 to 4 inches across and 8 to 12 in number, of a delicate lilac pink shaded with clear blue. Perfectly hardy. Each, 35c, postpaid.

Amaryllis Johnsoni. The immense trumpet-shaped flowers, measure 6 to 8 inches across, are borne on strong, fleshy flower spikes and are rich, deep velvety crimson, each petal having a broad white stripe, contrasting beautifully with the deep red color. Each, 35c, postpaid.

Amaryllis Vittata Hybrids. Beautiful, striped, flaked and feathered. Each, 50c, postpaid.

Bessera Elegans. Coral Drops.

Flower stems from one to two feet high, bearing loose umbels of beautiful, drooping scarlet and white flowers. A charming bouquet flower. Each, 5c; 3 for 10c; doz., 35c, postpaid.

Caladium Esculentum.

"Elephant's Ears." A handsome plant of tropical aspect, bearing leaves sometimes a yard or more in expanse. Effective as a single plant on a lawn, or in groups; also useful for decorative effect near streams or ponds. Bulbs can be stored in dry sand in winter and kept from year to year. Large bulbs, 15c each; \$1.50 a doz., postpaid. By express, \$7.50 per 100; extra large bulbs, each, 35c; a doz., \$4.00, postpaid; by express, \$15.00 per hundred; mammoth bulbs, each, 75c, postpaid.

Calla Elliottiana.

This is the Yellow Calla of marvelous beauty. Flowers are very large, rich deep golden yellow, often 4 to 5 inches across the mouth, leaves are spotted with white. Handsome foliage together with flowers present a striking appearance. Each, 50c, postpaid.

Cyclobothra Flava.

Resembles Bessera Elegans in growth; the flowers, however, are cup-shaped, golden-yellow with black spots, and of nodding habit. Each, 5c; doz., 50c, postpaid.

Gloxinias, Giant Flowering Hybrids.

A charming summer flowering house plant of very easy culture. Should be given as much light as possible, but shaded from the direct rays of sun. **Emperor Frederick.** Red, with pure white border. **Emperor William.** Violet blue, with white throat tinged and spotted, beautifully streaked and spotted. **Defiance.** Rich crimson scarlet. **Mont Blanc.** Pure white. Each, 15c; doz., \$1.50, postpaid. One of each of the four varieties, 50c, postpaid.

Hyacinthus Candicans. Summer Hyacinth.

A species of Hyacinth which blossoms during August and September, growing three to five feet high, with spikes of pure white flowers two feet in length. The bulbs throw up gigantic spikes of thimble-shaped white blossoms. Planted in the spring they bloom August to October, strong bulbs producing two, three and even four flower stems. Each, 10c; 3 for 25c; doz., 75c, postpaid.

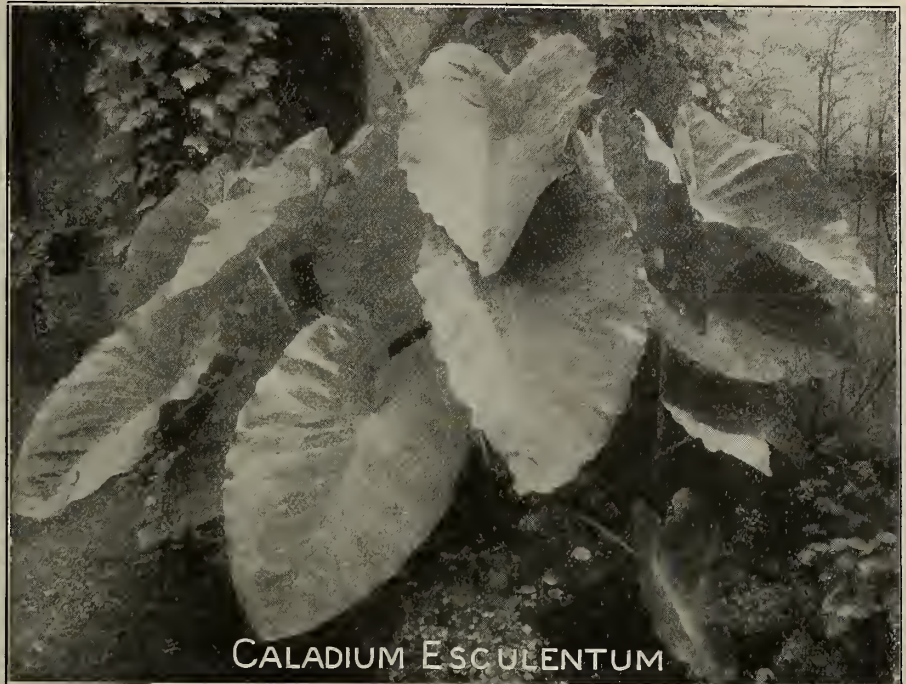
Milla Biflora. Mexican Star Flower.

The beautiful flowers are pure waxy white, two inches in diameter, star-shaped and usually in pairs on long slender stems. The blossoms frequently last two weeks when cut and placed in vases of water. It is a perfect gem. Each, 5c; doz., 50c, postpaid.

Montbretias.

Hardy border plants with elegant and gracefully branched Gladiolus-like flowers which are much prized for cutting during summer. The colors vary from clear yellow to rich scarlet, and the plants grow about 2 feet in height. Plant bulbs five inches deep. Most winsome flowers we know of. Should be grown in groups and are thus remarkably showy and brilliant. From August to October, they are one mass of flowers, spike after spike of the flame-like beauties appearing. Postpaid at single and dozen prices.

California.	Deep golden yellow.	Each Doz.	100
Etoile de Feu.	Star of Fire. Rich scarlet, yellow centre.	3c	.25 \$1.50
Germania.	Has large, perfect, bright, orange-colored flowers. It is much freer in bloom than any other.	3c	.25 \$1.50
Rayon d'Or.	Deep yellow, spotted brown, very large.	5c	.50 \$3.50
Rosea.	Bright salmon-rose.	3c	.25 \$1.50
Speciosa.	Dull nankeen, yellow disc in the centre, very distinct.	3c	.25 \$1.50
Mixed Sorts.		3c	.25 \$1.50



CALADIUM ESCULENTUM

Oxalis.

No bulb is so valuable for edging the borders of walks or flower beds as the beautiful flowering Oxalis. When planted three inches apart they produce an unbroken row of elegant foliage and pretty flowers; and as they bloom quickly after planting they furnish a neat and attractive border the whole season. The bulbs can be planted the first of May, or perhaps earlier, and will bloom the first of June. No flower easier grown than this, as they are sure to succeed in all soils and situations. They are also charming when grown in pots and make a very attractive mass of fine foliage and gay flowers. They can be planted in this way at any time during the winter or spring, and will commence blooming at once.

Dieppi. Pure white; very fine
Lasandria. Fine rosy-pink, beautiful cut foliage.

Shamrock. Lovely clover-like foliage and pink blossoms.

Mixed Colors. Several sorts. Price, doz., 10c; 25 for 15c; 100 for 50c, postpaid.

Tigridias.**Shell Flower.**

Curious and beautiful shell-like flowers, flowering from July to October. The bulbs can be planted about the middle of May, and taken up in October and kept over winter in dry sand.

One of the most showy of all summer bulbs, and blooms from mid-summer until frost, growing two feet high, with large wide-open triangular blooms, four to six inches across. The colors and markings are very brilliant and peculiarly odd and attractive, and clumps of them in the border have a most gorgeous effect. It is difficult to name a flower of such unique and exquisite beauty as a Tigridia, the superb spotting being so striking and handsome. Each, 5c; doz., 50c, postpaid.

Tuberoses.

Pure white, sweet scented flower; is one of the most popular of summer blooming plants.

Mammoth Excelsior Dwarf Pearl. Extra selected, double full-flowered, by mail, each, 7c; 4 for 25c; doz., 60c, postpaid; by express at purchaser's expense, 100, \$3.00. We supply 25 and over at the hundred rate.

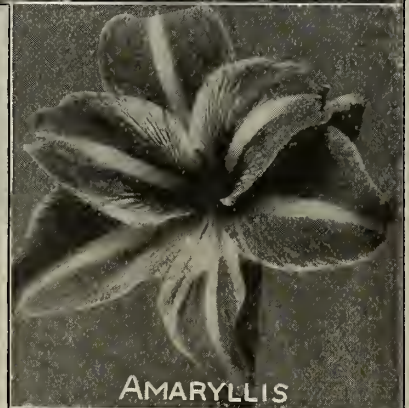
First Size Bulbs. By mail, 3 for 12c; doz., 30c, postpaid; by express at purchaser's expense, 100, \$1.50.

Zephyranthes.

The Zephyr flowers, or Fairy Lillies, are gems of rare beauty; and when planted either in pots or the open ground they produce very beautiful Lily-like flowers nearly all summer. When once grown they are always grown, for they are very beautiful and of easy culture. For pot culture plant three or four in a 5 or 6-inch pot and they will bloom beautifully. For the garden, plant in spring and lift them in the fall like Gladioli.

Rosea. Beautiful clear rose; flowers large and very handsome; blooms all summer. Each, 5c, doz., 50c, postpaid.

Candida. Pure white and the most profuse bloomer of all. 3 for 10c, doz., 35c, postpaid.



AMARYLLIS



MILLA BIFLORA



GLOXINIA



A Beautiful, Smooth, Velvety, Green Lawn is Certain Through Sowing Northrup, King & Co.'s "Sterling" Lawn Grass Seed

Sold only in Sealed Bags.
ANALYZED AS TO PURITY :—: TESTED AS TO GERMINATION
As Fine Lawn Seed as Experience can Suggest, or Money can Buy.



Northrup, King & Co.'s Sterling.

A smooth, velvety lawn surrounding a house adds not only to the value, but enhances the enjoyment of every home, whether it be in city, town or country. When properly made, a lawn is as satisfactory as any investment a home owner can make.

A lawn may be made in two ways, by sodding or by sowing seed. Sodding is not only very expensive, but unsatisfactory as well.

Sods are ordinarily taken from a pasture or along the roadside and make their appearance after the lawn is made. Seeding is not only more economical but is attended with better results.

The most important thing to consider in selecting seed for lawn grass is to obtain a proper mixture of several varieties, for two reasons. First, each variety is at its best during a certain part of the season. By properly choosing early, medium and late grasses, a smooth, even, green lawn is assured from early spring to late autumn. Second, a given area can support only so many grass plants of one kind for they all absorb the same sort of food, but if several varieties are sown, the same area will support many more plants, as different sorts live on various elements in the soil. This will give a much thicker and more luxuriant turf all over the lawn.

With these facts in mind our Sterling Lawn Grass Seed is scientifically combined. Our experience of many years has given us an intimate knowledge of grasses, their habits and requirements. In our Sterling Lawn Seed are included the best varieties—pure, clean and free from foul seed.

Our Sterling Lawn Seed is very quick in growth and is ready for mowing in from six to eight weeks from the time the seed is sown.

From early spring until late in the fall, lawns sown with our Sterling Lawn Seed remain green and fresh, for the reason, that this mixture includes quick growing varieties which are at their best soon after the frost is out of the ground, others that mature and flourish in midsummer, and still others that are greenest and sturdiest in autumn. For each of these seasons there are several different varieties living on different elements in the soil, so that one is certain always to have a satisfactory carpet of green wherever our Sterling Lawn Seed is sown.

Strangers visiting Minneapolis, frequently comment upon the beauty of its lawns, both in the public parks and about the homes of the residents. Our Lawn Grass Seed is used very extensively, not only in our own city, but in all parts of the United States, and the demand for it is increasing every year. Our Lawn Seed is used on golf courses, tennis courts, croquet lawns, athletic fields, in parks, cemeteries and private grounds, with unvarying success. A brand of lawn grass seed, such as our Sterling Mixture, which gives perfect satisfaction for these requirements is bound to insure a fine, beautiful, velvety turf around any well cared for residence.

Not only is Sterling Lawn Seed suitable for making new lawns, but it is equally valuable for quickly renewing old, worn-out areas.

Our BOOKLET ON LAWNS tells how to build new lawns, how to repair old lawns, and how to keep lawns green. We will mail one of these booklets free to any one on request, or it will be sent with every order for

Board of Park Commissioners Minneapolis, Minn.

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THOMAS VEEGEL

November 20, 1913.

Northrup, King & Co., Seedsmen,
Minneapolis, Minn.

Gentlemen:-

It is with considerable pleasure that I write you concerning the satisfactory results we obtained from the lawn grass with which you supplied us this past season. In addition to repairing many wornout and barren spots, we seeded down large areas which were entirely new last spring and summer. The seed grew quickly and formed a heavy, green sward in less than eight weeks from sowing.

Purity and germination tests of samples showed your seed to be remarkably free from foreign or foul weed seeds and the growth was quick and even. I can conscientiously state that the grass seeds supplied by you have been in every way highly satisfactory and I do not hesitate to recommend seeds of such excellent qualities to all who need them.

Yours truly,

BOARD OF PARK COMMISSIONERS

Therodrup King & Co.
Sup.

TW-AD

Lawn Grass Seed, without extra charge. Our Sterling Lawn Seed is free from chaff, being especially cleaned, and therefore less bulky than seed not so well prepared. A pound of Sterling Lawn Seed will cover a much larger area than will a pound of the cheaper mixtures. In making a new lawn one pound of Sterling Lawn Seed will sow 350 square feet.

Price of Northrup, King & Co.'s Sterling Lawn Grass Seed. Lb., 30c; 10 lbs., \$2.75; 20 lbs., \$5.50; 25 lbs., \$6.75; 50 lbs., \$13.00; 100 lbs., \$25.00; by express or freight at purchaser's expense. If wanted by parcel post add for postage at rate on page one.

LAWN GRASS

For Special Locations.

Northrup, King & Co.'s Shady Place Mixture.

(Sold only in sealed bags.) On almost every lawn there are shady places where difficulty is experienced in getting grass to grow. These bare spots are very unsightly and disfigure the lawn. In such places proper seeding may be all that is required. In this mixture we have combined fine, dwarf growing, ever green varieties which do well in sheltered or shaded spots. Some varieties of grass require more sun than others, therefore if the kinds which need the least sun are selected, those sorts when sown in shady places will thrive and make a good appearance. Frequently a shady lawn, which is at the same time insufficiently drained, becomes affected with moss and coarse, bog grasses. In such cases an application of slacked lime at the rate of forty to fifty pounds to each thousand square feet is an excellent remedy; but the moss should be first removed with a sharp rake. When this is done, sow our Shady Place Lawn Mixture, which will bring greenness to the bare spots and restore the beauty to your lawn. Of course, very densely shaded places are quite hopeless and no variety of grass can be made to flourish under such conditions. Price. Lb., 35c; 10 lbs., \$3.25; 20 lbs., \$6.50; 25 lbs., \$8.00; 50 lbs., \$15.50; 100 lbs., \$30.00; by express or freight at purchaser's expense. Bags free. If wanted by parcel post add for postage at rate on page one.

Northrup, King & Co.'s Terrace

Mixture. (Sold only in sealed bags.) The secret of a fine sward for terraces lies in obtaining grasses which root deeply and spread so as to make a heavy mat of sod. To keep such sod in first-class condition, the grass should not be cut too often nor too closely. Give it a chance to grow strong and tough. Let the food which the grass blades get from the air, dew and rain, work down to strengthen the roots. This mixture is best suited for sowing on terraces, embankments and hillsides, preventing heavy rains from washing them out, and withstanding drought and exposure; produces at the same time a velvety, luxuriant turf of especially fine appearance. Some years ago, at the time the Minneapolis Industrial Exposition Building was opened, the grounds were terraced to the street. The management was anxious to have the grounds look as well as possible, but was in a quandary as to the terrace. We supplied them with our Terrace Mixture six weeks before the Exposition opened, with the result that at the end of that time the terraces looked as though they had been established for several years. Lb., 35c; 10 lbs., \$3.25; 25 lbs., \$8.00; 50 lbs., \$15.50; 100 lbs., \$30.00; by express or freight at purchaser's expense. If wanted by parcel post, add for postage at rate on page one.

Lawn Restoring Grass Seed. In the spring of the year there are, in almost every lawn, thin or bare spots which were caused by ice or exposure during the winter months. These may be very quickly renewed by an application of this mixture which is made up of those varieties of seeds which will rapidly grow and occupy ground before weeds obtain a foothold. A spotted lawn may thus be made uniform and beautiful at slight expense. Price, Lb., 40c; 10 lbs., \$3.75; 20 lbs., \$7.50; 25 lbs., \$9.25; 50 lbs., \$18.00; 100 lbs., \$35.00; by express or freight at purchaser's expense. If wanted by parcel post, add for postage at rate on page one.

Fair Green Mixture. On golf courses a mixture of grass seed is required which will give a smooth, level, compact turf. Our long experience in the mixing of grasses enables us to select those best adapted for this purpose. This seed was sown



Seeded with Northrup, King & Co.'s Shady Place Lawn Mixture.

on the Minikahda Club's golf course, pronounced by professional players to be the finest sward in the country. Price. Lb., 35c; 10 lbs., \$3.25; 20 lbs., \$6.50; 25 lbs., \$8.00; 50 lbs., \$15.50; 100 lbs., \$30.00; by express or freight at purchaser's expense. If wanted by parcel post, seerates on page 1.

Putting Green Grass Seed. Creeping Bent Grass, Agrostis Stoloniifera; a grass of deep, fibrous rooting character; forms a strong, durable turf. Excellent for croquet or bowling greens, tennis lawns, putting greens or other places where a durable, fine sward is desired. Present value. Lb., 55c; 10 lbs., \$5.25; 25 lbs., \$13.00; 100 lbs., \$50.00; by express or freight at purchaser's expense. If wanted by parcel post, add for postage at rate on page one.

Nurse Crops For Lawns. Kentucky Blue Grass is the basis of good grass seed mixtures and the one which will eventually, occupy the land. It is very slow to germinate, frequently lying in the soil 5 to 6 weeks before sprouting. On this account we advise the general use of nurse crops. For this purpose we recommend oats, medium red clover and winter rye, to be used according to the suggestions below. For the fall nurse crop use winter rye.

Nurse crops are especially desirable when a lawn is sown very late in the spring and there is danger that the hot sun will dry up the soil and burn the grass seedlings before they become well started. Under these conditions either oats or medium red clover are useful. Oats produce shade more quickly, but medium red clover is more attractive and also enriches the soil. Medium red clover is also valuable for improving vacant lots, boulevards, or wherever a good effect is desired at slight expense.

Grass Seed Required.

Quantity For New Lawns.
1 lb. for 350 square feet.
3 lbs. for 1050 square feet.
5 lbs. for 1750 square feet.
10 lbs. for 3500 square feet.
100 to 125 lbs. per acre.

Sterling Garden and Lawn

Fertilizer. An excellent lawn dressing containing the proper plant food to stimulate the grass into luxuriant growth. This is especially valuable in early spring to fertilize the bare places before sowing seed. See page 154 for complete directions. Prices: 5 lbs., 30c; 10 lbs., 60c; 25 lbs., \$1.00; 50 lbs., \$1.75; 100 lbs., \$3.00; 500 lbs., \$12.50; 1000 lbs., \$25.00, F. O. B. Minneapolis.



Partial View of Minikahda Golf Links, Sown with our Fair Green Mixture.

SELECT NORTHERN GROWN FIELD SEEDS

Prices quoted on Field Seeds are those in effect at the time this catalogue goes to press. We will maintain these prices as long as possible, but cannot guarantee them throughout the season. All values are subject to market fluctuations and seed is offered, subject to prior sale. Order early before our stocks are exhausted. Our Red Figure Price List of Field and Grass Seeds is issued from time to time during the season and will be mailed free, on request to any address.

NORTHROP, KING & CO'S. LINCOLN OATS

Northrup, King & Co.'s Lincoln Oat

Reg. U. S. Pat. Off.

Sold only in Sealed Bags.



We believe the Lincoln to be as fine an oat as was ever introduced for growing in the Northwest. We make this claim after twenty years, during which time it has been grown by thousands of farmers over a wide territory and under various conditions of soil and climate. We introduced this oat in 1893. It was a fine oat then; it is even better to-day. Our sales have steadily increased from year to year, until now it is difficult to supply the immense demand. Why has it become so popular? Because of the reputation it has attained people will have it, and insist on genuine seed which is put up in sealed bags only.

Earliness. This is not the earliest oat, as its size and heavy yield cannot be attained in the shortest period, but it matures only a few days after the small, early oats and gives a yield and a quality which will please the most exacting grower.

Adaptability. Our Lincoln oats are grown in the Northwest and are well acclimated to the extreme weather conditions which exist here both in spring and summer. Oats that will grow and thrive and produce big yields in the Northwest, will do well most anywhere, and under most all conditions.

Straw. A most essential point in successful oat growing is to have a variety with stiff, strong, heavy straw. The Lincoln Oat is especially valuable in this respect. It stands up under heavy winds and rarely, if ever, does it lodge. Even on rich soil it gives the most satisfactory results. Another characteristic of the Lincoln Oat is its remarkable stooling propensity, which accounts in part for the heavy yield. On account of its strong, robust, healthy growth it resists rust when other sorts are greatly damaged by this disease. No oat is entirely rust-proof, but we believe the Lincoln to be as nearly free from rust as any oat can be. Lincoln Oats have a spreading or sprangle top head.

Quality. The Lincoln Oat has a thin hull, a heavy meat and soft nib. Whether for home consumption or for market, these points of merit go a long way towards deciding the value of your crop. In addition, the color is a fine white, bright and clean. Such oats usually grade higher on the market than others and a cent or two per bushel on the crop will more than pay the extra cost of seed, to say nothing of the extra yield which may be secured, and the desirability of keeping the land free from weeds.

Yield. We know of no variety which has given as large average yield as the Lincoln, averaging 20 to 30 bushels more per acre than home grown oats.

Price of Lincoln Oats. Lb., postpaid, 20c; $\frac{1}{4}$ bu., 45c; bu., of 32 lbs. \$1.35; 2 bu. @ \$1.30; 10 bu. @ \$1.20; 100 bu. @ \$1.10. Sacks free.

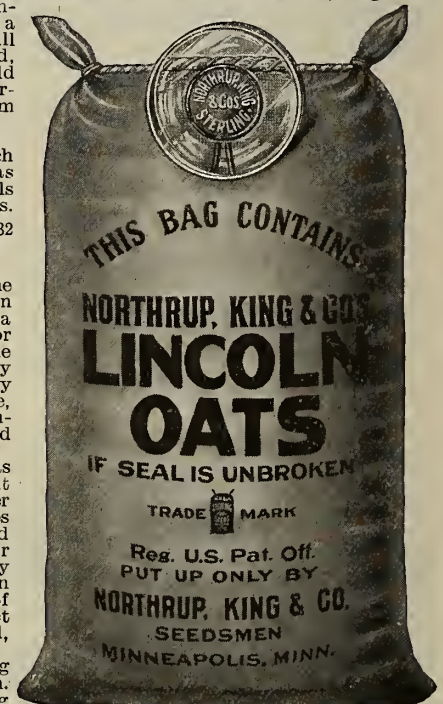
Reg. U. S. Pat. Off.

The above set of abbreviated words convey the information that the trade mark in connection with which it is used, has been "Registered in the United States Patent Office." As we were first to use Lincoln as a trade mark for a certain kind of oats and have continually used it for twenty years, the United States Patent Office has registered this trade mark and gives us exclusive use of same. It is contrary to law for any firm or individual to use our trade mark without our permission. Every bag of Lincoln Oats which we send out will have in addition to the name, the mark, "Reg. U. S. Pat. Off." No other oats are genuine. Buy Lincoln Oats, either from us, or from those who you are certain obtained their seed from us.

Caution. Do not be satisfied with common, ordinary oats, such as can be bought at any FEED STORE, when for the slight additional cost of the seed you can secure our Lincoln Oats. The finer quality and larger yield obtainable by sowing our oats will many times repay the difference in price. The only safe plan is to buy your seed from us or from those who can show proof of having obtained their seed direct from us. Northrup, King & Co.'s Lincoln Oats are sold only in sealed bags, each bearing our name and trade mark, as shown in illustration. Note the Sterling Seal under the magnifying glass at top of bag. None other are genuine. Don't be imposed upon. You can get our Lincoln Oats if you want them, either from dealers selling our seed, or from us direct; providing of course that our stock is not sold out.

Our Sterling Seal is placed at the top of every bag containing Sterling Seed, both for the guidance of the buyer and to prevent substitution. If seal is perfect and the cord unbroken, it is assurance that the bag contains the best seed to be obtained anywhere at any price.

When buying seeds be sure to look for the Seal and Trade Mark.



Notice the Sterling Seal shown under the magnifying glass at top of bag.

Three Heads of
Northrup, King & Co.'s
Lincoln Oats.



Harvesting Northrup, King & Co.'s Lincoln Oats.

OATS

Note—All prices on grain subject to market changes.

Big Four Oats. These are very handsome and heavy white oats of great productiveness, and have become very popular in many sections of Iowa, Wisconsin, Minnesota and South Dakota. They do very well on ordinary soil. On rich, heavy land it grows so rank, the straw not being large in proportion to its weight, that they are much inclined to lodge. Large yields have been reported from this oat. Although the past season has not been at all favorable for oats and most samples show bad discoloration, we offer stock which is of good appearance and which under favorable circumstances will give an excellent yield of good quality. Price, lb., 20c, postpaid; by express or freight, $\frac{1}{4}$ bu., 35c; bu., \$1.05; 2 bu. @ 95c; 10 bu. @ 90c. Bags free.

Regenerated Swedish Oats. (Canadian Grown.)

Canada, for many years, has produced the best oats in America, both as regards yield and quality of the grain. We have secured a limited quantity of Canadian Grown Regenerated Swedish Oats. These were originally quite a late variety, made early by growing in the high altitude in which they were developed. They are an improved strain of Swedish Oats we have offered for several years. The Regenerated Swedish Oats are medium early, and in yield, far superior to the Swedish. We know of instances where 110 to 120 bushels per acre have been harvested under favorable conditions. Under ordinary growing conditions, however, a yield of fifty to seventy-five bushels is quite certain.

The quality of the grain is also superior to the Swedish, the kernels being more plump, and very heavy. The Regenerated Swedish Oats we are offering have been bred to such a high state of perfection that they usually test about 44 lbs. to the measured bushel. We recommend sowing 2 to 2 $\frac{1}{2}$ bushels by measure per acre, depending upon the richness of the soil. These oats will do remarkably well on rich land providing a thoroughly worked seed bed is prepared and a uniform seeding is made.

Price, $\frac{1}{4}$ bu., 45c; bu. of 32 lbs., \$1.45; 2 bu. @ \$1.35; 10 bu. @ \$1.30; 100 bu. @ \$1.20.



A Field of Regenerated Swedish Oats in the Shock.

Swedish Oats. While it is our desire to have as many of our customers as possible order a quantity of the Regenerated Swedish Oats, our regular Swedish Oats have given such general satisfaction that we know many will still adhere to this favorite. For the benefit of these we have secured seed which is of the usual high standard. At the Wisconsin Experiment Station it has stood at the head of the list for several years, having been distributed by that station as Wisconsin No. 4. Prof. Moore of Wisconsin, says of the Swedish Oat, "The most satisfactory of all." Prof. Carleton of U. S. Department of Agriculture says, "Probably the best American Oat." Prof. Shepard of the South Dakota Station says, "They are the best drought resister of all our new plants."

The Swedish Oat has been recommended by experiment stations and others for all soils. We are not inclined to agree in this. Its habit of growth is so vigorous that on heavy soils it is likely to lodge. For light soils it has no superior. Price, $\frac{1}{4}$ bu., 40c; bu., \$1.15; 2 bu. @ \$1.05; 10 bu. @ \$1.00; 100 bu. @ 90c. Bags free.

Abundance Oats. A superior white variety, largely grown in England and Canada. They are early and for this reason, frequently make a crop when other varieties fail or are damaged by hot weather. The yield is unusually large, surpassing ordinary varieties from 15 to 25 per cent. The straw is stiff and strong. The roots are extensive, making the plants hardier and more drought resistant. We offer Canadian grown seed, heavy and of extra fine quality. Price, $\frac{1}{4}$ bu., 45c; bu., \$1.40; 2 bu. @ \$1.30; 10 bu. @ \$1.25.

American Banner Oats. This variety has been held in high esteem for many years, especially in Canada where it is well known. We are very fortunate in being able this season to procure a stock of this splendid variety, grown in Canada, where it has been selected and improved upon. The seed is very heavy, weighing up to 45 lbs. to the measured bushel.

The chief claim of the American Banner Oat to distinction is its earliness, productiveness and uniformity of ripening. It will be noticed with most oats that when the great body of them is ripe there are many small and immature oats which do not fill out and which disappear over the tail board in cleaning and are therefore waste. The superiority of the American Banner Oat in this particular above all other oats is very marked and probably adds fully 10 per cent to its yield.

The straw is stiff, free from rust and of good color, kernels long and white, hull is thin, making an oat of fine feeding quality. Price, $\frac{1}{4}$ bu., 40c; bu., of 32 lbs., \$1.25; 2 bu. @ \$1.15; 10 bu. @ \$1.10. Bags free.

Black Beauty Oats. At the present time but few black oats are grown in America. Canada has found how good they are and is now growing them very largely. They are also grown quite largely in European countries.

They are preferred by those who have had experience with them, principally on account of their superior yielding qualities, but besides being fully equal, if not better than white oats in point of feeding qualities, they possess another very valuable characteristic in the unequalled stiffness and strength of straw.

Black Beauty Oats are the best of all black oats. They are early, the straw is exceedingly strong and vigorous, and the head is extremely long. On account of its remarkable stooing propensities two bushels are amply sufficient to seed an acre. We have only a limited amount of Black Beauty Oats and will be unable to obtain more after our present stock is exhausted. Price, $\frac{1}{4}$ bu., 45c; 1 bu. \$1.35; 2 bu. @ \$1.25; 10 bu. @ \$1.20; 100 bu. @ \$1.10. Bags free.

Black Victor Oats. While the proportion of black oats to white oats, at present grown in this country, is small, yet in the aggregate the total acreage we believe is increasing and will continue to grow as the immense yielding qualities and high feeding values are more generally known. The Black Victor Oat adapts itself very readily to Northwestern conditions and is also very hardy.

It is equal to most white oats in feeding quality and has the advantage of stiffer and stronger straw. For this reason it does not lodge very readily. The heads are slender but of good length. Under favorable conditions it will yield up to 80 or 90 bushels per acre. Price, lb., 20c, postpaid; $\frac{1}{4}$ bu., 50c; bu., \$1.45; 2 bu. @ \$1.35; 10 bu. @ \$1.30. Bags free.



Black Victor Oats.

OATS

SPECIAL NOTE TO BUYERS OF LARGE QUANTITIES.

Those desiring to purchase large amounts of oats, other grain or grass seed, should send us a list of their wants for special prices immediately on receipt of this catalogue. We will then be glad to quote the latest prices either F. O. B. Minneapolis or shipped to your station.

Extra Selected White Oats.

The quality of home grown oats is inferior this year, so many of our customers will wish to change their seed. We have made an extra effort to locate lots of nice quality oats and are now able to offer them at a moderate price to those who do not desire to plant any of our special varieties but want good, heavy, white oats.

These are fine oats which we carefully reclean and are able to offer at a very reasonable price. Prices are subject to market variations. Bu., 95c; 10 bu. @ 90c; 100 bu. @ 85c. Write for special prices on car lots.

Improved White Russian Oats.

The original stock of White Russian Oats was a capital oat, and sprang immediately into great favor. It is quite distinct from most other varieties, being a side or horse mane oat. It is a well established fact that the true White Russian is as nearly rust proof as any oat can well be, and we are confident that there will be a great demand for this variety. It is a good yielder and quite hardy. It is not quite so early as some other varieties, but on account of its ability to withstand unfavorable weather will be found very satisfactory. Lb., 20c, by mail, postpaid; by express or freight, ¼ bu., 35c; bu., \$1.15; 2 bu. @ \$1.00; 10 bu. @ 95c. Bags free.

Kherson Oats. These oats originally came from Russia, where they were known as the best extra early, hardy, good yielding oats. Kherson Oats, when ripe are a beautiful yellow in color. They have fine large sprangles or full heads. The straw is stiff and is not subject to rust nor does it readily lodge. The leaves are broad and extend nearly to the roots. The straw makes unusually good fodder and is readily eaten by all kinds of stock. They are a good yielder under favorable conditions. They do much better than many other varieties in dry seasons, giving a fair crop when other varieties yield hardly 10 bushels to the acre. We have a fine lot of Kherson Oats for seed. Price, lb., 20c, postpaid; ¼ bu., 40c; bu., \$1.15; 2 bu. @ \$1.05; 10 bu. @ \$1.00. Bags free.

Sixty Day Oats. The seed of this valuable oat was secured in Russia by the United States Department of Agriculture in 1901. Some was sent by the Government to the South Dakota Experiment Station. "With only two exceptions, every farmer to whom we have sold this oat is still growing it and is much pleased with it. It is similar to the Kherson oat, which has been a marked success in Nebraska, but it is adapted to a section somewhat farther north than that variety. In North Dakota the Sixty Day Oat has headed the list of varieties under trial for the last three years. It is a small yellowish oat that weighs about 34 pounds a bushel. The hull is very thin, being easily shelled off in threshing if the concaves are set too closely."

The Sixty Day Oat has made a fair crop when other varieties failed entirely. It is so early that it may be harvested with barley, and is three weeks ahead of most other sorts. The average yield of Sixty Day Oats at the Minnesota Experiment Station has been 64 bushels an acre. Some years have been very unfavorable and the yield in 1903 was only 41 bushels an acre, which was larger than any other variety grown on the Station grounds. This is not a side oat. Price, lb., 20c, postpaid; by express or freight, ¼ bu., 40c; bu., \$1.15; 2 bu. @ \$1.05; 10 bu. @ \$1.00. Bags free.

Montana Wonder Oat. This strain of wonderfully productive oats was grown for us in Montana where it is in great favor. We have distributed this variety in many localities in Minnesota, Wisconsin and the Dakotas and every report we have received is highly commendatory. The yield is very large, exceeding many of the well-known varieties when grown side by side. The straw grows tall but is stiff and strong and does not readily lodge. The oats are borne in long, loose heads and are white and clean. They mature medium early, about a week or ten days after the extra early sorts. Lb., 20c, postpaid; ¼ bu., 35c; bu., \$1.05; 2 bu. @ 95c; 10 bu. @ 90c.

Silver Mine Oats. This oat has a reputation as an exceedingly heavy and reliable yielder. It is very hardy and prolific and yields beautiful white kernels, which are especially desirable for the manufacture of rolled oats.

Oat meal is becoming a staple in the United States as it is in Scotland and our mills are handicapped by the lack of good oats.

The heads are very large in proportion to the stiff, bright, clean straw. The sprangle top heads, although long, are borne low down on the stalk, which seems to prevent lodging. As a rule, oats yield a greater profit an acre than wheat, and they are also a more reliable crop. The demand for this variety last season exhausted our supply and we suggest early orders to avoid disappointment. Lb., 20c, postpaid; ¼ bu., 35c; bu., \$1.00; 2 bu. @ 90c; 10 bu. @ 85c. Bags free.

Prices Subject to Change. All prices on grass and field seeds are subject to market changes. This page is being compiled Dec. 15th so some items are necessarily estimated and are subject to later revision.



All Our
Oats Are
Northern
Grown.

Scottish Chief.

It commands a good price on the market, being full and plump, pure white and very heavy. The straw is strong and stiff, holding up well and withstanding quite heavy winds.

It readily adapts itself to change of soil and climate

and is a good drought resister. Price, lb., \$1.10; 2 bu. @ \$1.05; 10 bu. @ \$1.00. Bags free.

Minnesota No. 281 and Minn. No. 295 Oats.

The Minnesota Experiment Station secured planting stocks of every known variety of oats and grew them for a number of years. From these they selected the two most promising sorts and commenced saving seed from the individual plants which showed the best characteristics. These two varieties thus improved were first named Minnesota No. 6 and Minnesota No. 26. They are now known as Minnesota No. 281 and Minnesota No. 295. Prof. Bull writes us: "It has been a question in my mind for the past year or so whether No. 281 or No. 295 is the better oat. To the farmers, No. 281 looks far the better while growing, but our trials here show No. 295 yields more an acre and has a thinner hull than No. 281. The character of the berry is inclined to be long and slim while that of No. 281 is of the short, plump, potato type. Minnesota No. 295 also seems to resist lodging better than Minnesota No. 281."

The average yield during 14 years at the Minnesota Experiment Station of the No. 281 Oat is 68.9 bu., of the No. 295 Oat, 62.2 bu. Both these oats have spreading panicles.

Prices on Minnesota No. 281. { ¼ bu., 55c; bu. of 32 lbs., \$1.70; 2 bu. @ \$1.60; 10 bu. @ \$1.50. Bags free.

FLAX

Minnesota No. 25 or Primost.

This is a pure bred Flax. It was selected from a variety which came to the Minnesota Experiment Station from the U. S. Dept. of Agriculture.

In 1896 numerous individual plants were selected from a bed of this flax, some with heavy, bushy tops to be used in breeding for a larger yield of seed; others with tall, slender stems for fibre. Each of these selected mother plants was grown in the nursery for several years, and the resulting varieties from some of them were so promising that they were increased and put into the field variety test plots where they were grown for three years: 1902, 1903 and 1904. The best of these stocks selected for seed is the Minnesota No. 25, and named Primost, and its record in the field tests at the Minnesota Experiment Station showed an average yield for three years of 19.3 bu. per acre, or 3.4 bu. more than the average of three commercial varieties.

In 1905 seed was sent to a number of Minnesota farmers by the Experiment Station to see what the flax would do under ordinary farm conditions.

The average yield per acre was 15 bu. which was 3.1 bu. more than common flax or an increased yield of 26 per cent.

An increase in yield of three bushels of flax an acre means an extra profit of about \$4.50 an acre at the present price of flax.

There can hardly be a doubt that this is the champion flax of the Northwest. The yield at the Minnesota Experiment Station for 1908 was 16 bu. an acre. The state average for 1907 was only 10.5 bu. an acre and the United States Department of Agriculture reports the average yield for the United States for six years was only 9.4 bu. an acre.

We have to offer this season a few carloads of very fine Minnesota No. 25 or Primost Flax. The supply of this particular lot of seed is not nearly sufficient to cover the demand we will have for it and for that reason urge early orders if you desire to obtain some of this especially desirable flax.

The following quotation from a letter received from one of our customers calls attention to the extreme earliness of this flax, a feature equal in importance to its yield:

This No. 25 Flax is fully ten days earlier than any other flax. This ten days means a great deal to the flax growers of North Dakota. In former seasons I have lost my entire crop when if I had had this flax it could easily have been saved. I regard this No. 25 Flax as being of inestimable value to the farmers of the Northwest.

This valuable flax is also wilt-resistant to a very considerable extent. The past season has demonstrated this important fact. Price, lb., 20c, postpaid; ¼ bu., 80c; bu., \$2.50; 2 bu. @ \$2.45; 10 bu. @ \$2.35. Write for special prices on large lots.

N. D. No. 52 Wilt Resistant Flax.

Flax seed which is resistant to wilt has been bred by continually growing flax on wilt-sick land. Those plants which survive produce seed which is more resistant to the disease than the previous generation. Repeated sowing of each crop on the same land will in time produce seed which is practically immune to the effects of the wilt germ.

The N. D. No. 52 Flax which we offer was grown in North Dakota by a farmer who secured his original stock seed from the North Dakota Agricultural College. He states that he could raise no flax on his land until he got this seed. During the dry season of 1913 under trying conditions he secured a good crop, averaging over 10 bu. per acre. Under ordinary conditions the yield should be much greater. N. D. Press Bulletin No. 57 states, "Wilt Resistant seed as obtained by this department is capable of growing a normal crop of flax, or even better, on old wilt-sick lands, previously long cropped to flax. Such seed will keep this resistance against wilt just as long as the seed is properly handled". Price, lb., 20c, postpaid; ¼ bu., 80c; bu., \$2.50; 2 bu. @ \$2.45; 10 bu. @ \$2.35. Bags free.



A Field of Buckwheat in Bloom. Fine for Bees.



Specimen Heads of Minnesota No. 25 or Primost Flax.

Russian Flax. This is at present the standard sort used in the Northwest, although we expect the No. 25 or Primost to entirely supersede it as soon as the merits of that new sort become generally known. Flax seed can be bought from almost any farmer or elevator in the Northwest, but it is not what we call Seed flax. It is a rare sight now to see a lot of flax which does not contain mustard, and the ordinary fanning mill or cleaner will not remove all the mustard. It requires special machinery to make seed of any grain, and this is especially true of Flax. To sow mustard is to reap the whirlwind. Cleaning flax so as to make it "right" for seed is a somewhat expensive operation and involves a very considerable waste. So our price may seem high, but write for sample, use the magnifying glass, and compare it with flax from the farm or elevator and judge for yourself if our seed is not worth to you all it costs. Price, lb., 20c, postpaid; ¼ bu., 75c; bu., \$2.25; 2 bu. @ \$2.20; 10 bu. @ \$2.15. Write for special prices on large lots. Prices subject to market changes.

BUCKWHEAT

Japanese Buckwheat. Entirely distinct from all other varieties. It has the advantage of remaining for some time in bloom and produces seed earlier. On this account it can be grown farther north. It resists drought and blight very well. The seed is rich dark brown in color and larger than Silver Hull. As much as forty bushels to the acre have been harvested of this variety making it very profitable to raise. Buckwheat is now sold at 50 lbs. to the bushel. ¼ bu., 55c; bu., \$1.55; 2 bu. @ \$1.45; 10 bu. @ \$1.35. Bags free.

Silver Hull Buckwheat. This valuable variety originated abroad and is a decided improvement on the old black or gray sort. It is early, remains longer in bloom than other sorts. A fine variety for honey bees. The grain is of a beautiful light gray color, and has a thin husk. Millers prefer Silver Hull, there being less waste and it makes whiter, better and more nutritious flour than other varieties. Silver Hull is more productive and the grain meets with a more ready sale, bringing higher prices than the Japanese. Under favorable conditions it will yield 40 to 50 bushels an acre. ¼ bu., 55c; bu., \$1.55; 2 bu. @ \$1.45; 10 bu. @ \$1.35. Bags free.

RYE

Spring Rye. True Stock. Spring Rye makes an excellent crop where winter grain has been killed out, or for sowing where a fall crop has not been planted. If desired it can be turned under and made to answer a good purpose in adding to the fertility of the soil. Sow seed same time as other spring grain. Does not grow quite so large straw as Winter Rye, but usually yields as well and grain is of fine quality. We call particular attention to the fact that we offer genuine Spring Rye. Many have been disappointed in receiving Winter Rye as a spring variety, and we wish to emphasize the fact that we sell the genuine Spring Rye, sown in the spring and harvested the same season. We now offer an extra fine grade. To insure receiving enough for your requirements we advise placing your order early, as we have only a limited quantity. Price, ¼ bu., 60c; bu., \$1.80; 2 bu. @ \$1.75; 10 bu. @ \$1.70.

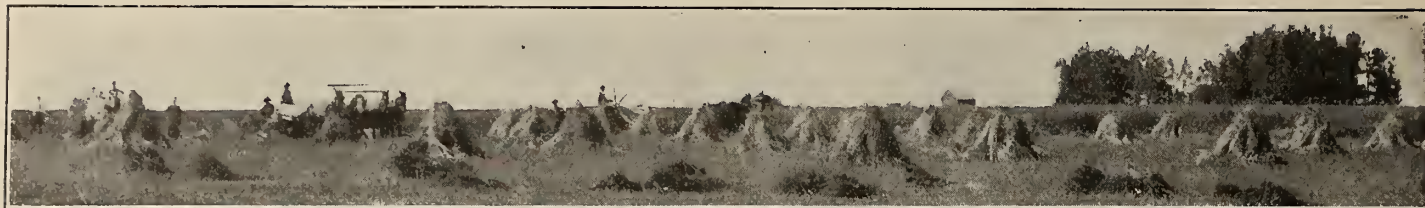


Northrup, King & Co.'s Amber Winter

Rye. (Sold only in sealed bags.) Amber Winter Rye is much harder than wheat and can be grown on a greater variety of soils. It will thrive in dry seasons and on light sandy loam. It is grown for grain, fodder, soiling purposes and green manure. Price, lb., 20c, postpaid; ¼ bu., 50c; bu., \$1.55; 2 bu. @ \$1.50; 10 bu. @ \$1.45. F. O. B. Minneapolis, sacks included. Prices subject to change.

Minnesota No. 2 Winter Rye. Originated and introduced by the Minnesota State Experiment Station. It has been grown there for several years and has proved more productive and better adapted to Northwestern conditions than all other varieties of rye. We recommend Minnesota No. 2 Rye as superior in all ways. Price, bu., \$1.65; 10 bu. lots @ \$1.55 per bu. F. O. B. Minneapolis, including bags.

All prices on grass and field seeds are subject to market changes.



MARQUIS WHEAT.

Remarkably Early. Exceedingly Productive. Unexcelled in Milling Quality.
Pronounced by Both Farmers and Millers the Finest Wheat for the Northwestern Spring Wheat Territory.

Origin. Marquis Wheat was originated by Doctors Chas. and Wm. Saunders of the Central Experiment Station, Ottawa, Canada, by crossing the Red Fife and the Hard Calcutta, a native wheat of India which had become acclimated to northern conditions. The first experiments were conducted in 1886, and it was not until 1903 that it was fully developed. By scientific cross breeding, a variety was produced that inherited the remarkable earliness of the Calcutta, and the frost-resistant and yielding qualities of the Red Fife. The original stock of seed was very small, but by careful husbandry the amount was gradually increased so that it might be disseminated throughout America.

A Prize Winner. Marquis Wheat won the One Thousand Dollar prize offered by Sir Thos. Shaughnessy for the best wheat in America, at the New York Grain Exposition in 1911. It also won the Three Thousand Dollar prize at the International Dry Farming Congress at Lethbridge, Alberta, in October, 1912, in a competition open to the whole world. Marquis Wheat was again successful in winning the Sweepstakes prize at the Dry Farming Congress held at Tulsa, Oklahoma in 1913.

Earliness. Marquis Wheat is from one week to ten days earlier than Red Fife and this fact alone should induce many of our customers to grow it this spring.

Read what Mr. Jas. Austin says about earliness and what it means to the wheat grower at a time when rust, smut, drought or hot winds may take his crop at any time. This week or ten days may save his entire crop from loss.

Productiveness. Marquis Wheat has out-yielded all other Spring Wheats grown under the same conditions of soil, cultivation and climate. The increased yield varies from 5 to 10 bushels per acre. Mr. Chas. Vandenhook of Bozeman, Mont. secured a crop of 52 bushels to the acre on a ten acre field of Marquis Wheat in the fall of 1913. The fields from which our seed was grown yielded nearly twice as much as Blue Stem under the same conditions. A five year average yield at the Brandon Experiment Station was 44 bushels per acre.

Quality. Marquis Wheat has by numerous milling tests, shown a higher percentage of gluten, a better color, greater absorption and heavy weight per bushel of grain. This question of quality is of great importance to the wheat grower when he comes to dispose of his crop at the mill or elevator. Almost without exception, Marquis Wheat will grade No. 1, Hard.

Appearance. Marquis Wheat is similar in appearance to Red Fife, but the heads, as a rule, are heavier and the straw shorter, making it less likely to lodge. The kernel is flinty, a little darker in color than Red Fife, being dark red, and more plump than that variety. It is beardless, having smooth, yellow chaff. It weighs from 64 to 66 pounds to the measured bushel.

Northern Grown. The seed we offer was raised in the Northwest on new land, the original seed stock coming from the Central Experiment Station at Ottawa, Ontario. Our stock is clean and pure and we believe represents as fine wheat as was ever grown in the Northwest. Being raised in the far North, this wheat has all the inherited tendencies of that locality, earliness, hardness and productiveness. Those who grew Northern grown Marquis Wheat in Minnesota, North Dakota, Montana, Iowa and other northern states last year, are, without ex-

ception, loud in their praises of this splendid new variety.

Reports on 1914 Yields. The summer of 1914 was not especially favorable to raising either large crops or fine quality of wheat. Excessive moisture followed by extremely high temperature and black rust reduced both the yield and grade. The unfavorable season emphasized the superiority of Marquis over other varieties. Minnesota points report almost double yield of Marquis grading No. 1 Northern as compared with No. 4 on other varieties. The Northern Pacific Ry. Co. reports 33 bu. per acre of Marquis compared with 17 bu. of Blue Stem at Mandan, N. D. Ex-Gov. E. Y. Sarles raised 30 bu. per acre at Hillsboro, N. D. Results equally in favor of Marquis are reported from Iowa, South Dakota, Montana and elsewhere.

Mr. Austin's Opinion. Mr. Jas. Austin, who has a large farm in the northern part of North Dakota, a year ago gave us his experience with Marquis Wheat. He said, "You sent me two bushels of your Marquis Wheat two years ago. I sowed this on old land and although it was a poor year, the wheat averaged 25 bushels to the acre. That was just 10 bushels heavier than the other wheats grown beside it. I sowed that 50 bushels of seed, after screening, on summer fallow and had 1400 bushels of wheat last year, notwithstanding the fact that weather was unfavorable and the wheat damaged by early snow-storms and heavy rains in the fall. I sold that wheat to my neighbors at 50 cents per bushel premium and did not have half enough. I sowed it again this year and it averaged over 25 bushels per acre on summer fallow or breaking. Not only did it yield better, but it was a week to ten days earlier than other wheats. Not only was this my experience, but all through the neighborhood, everyone I asked concerning it this year, as to how he liked it, said he was pleased because of its earliness and its heavy yield. One of my neighbors over the line in Canada, sowed a carload of Marquis Wheat last Spring. He had over 400 acres. It was ten days earlier than his neighbors' and he finished harvesting, threshing and plowing before others had their threshing done. He said to me, 'That is the wheat for me because I get my work done'. Of course, you can see the advantage of an early wheat. You know I took an European trip this year and that would not have been possible had I been sowing other wheat in the place of Marquis. It was Marquis Wheat that did it'."

In the fall of 1914 Mr. Austin reported that the increased yield and higher quality of his last crop of Marquis Wheat gave him \$3,000 more profit than he would have received had he sown Fife or Blue Stem varieties.

Milling Test. Marquis Wheat has been tested for milling qualities by several of the large flour mill companies of the Northwest. The Pillsbury Flour Mills Company makes the following report: "Color, 102 white, fully equal to No. 1 hard; the latter is creamy while Marquis is white. Gluten, 40.65 per cent, a high percentage of good, average quality. Absorption, 65, runs from 2 to 2½ per cent better than the average spring wheat. Moisture, 13.5 about the same as the driest wheat this year. Weight, 65 lbs. per bushel, insuring a good yield of the best quality flour. On the whole, this is an exceptionally fine wheat and will prove of great advantage to both farmer and miller, and its growth should be encouraged by everyone interested in the production of good grain. M. A. Gray, Chemist". The Russell-Miller Milling Co. states: "Replying as to our findings and opinion of Marquis Wheat, we have been much interested in this new variety. Have made many milling and gluten tests on its quality and collected such information as we could as to its adaptability to the Northwest. From our tests and observations we believe the Marquis Wheat shows the best milling qualities of any wheat ever raised in the northwestern Spring Wheat territory. Furthermore, it appears to yield appreciably heavier than Fife or Blue Stem, to mature something like ten days earlier and therefore with better resistance to rust, smut and lodging. We believe your effort to increase the distribution of Marquis Wheat will prove beneficial both to the farmer and miller. We are recommending it very strongly in our North Dakota territory and doing all we can to increase its distribution. All of our investigations and tests indicate that Marquis Wheat will produce a flour of quality superior to the Fife and Blue Stem varieties now raised in the Northwest. H. S. Helm, General Mgr'."

Price. We know of no variety of wheat which has sprung so quickly into popular favor and met with so wide-spread interest as Marquis Wheat. As a result, the demand is likely to exceed the supply, particularly of seed which is of first-class quality.

Considering the increased yield, finer quality and earliness of Marquis Wheat, the first cost of the seed is returned many times over in the additional value which may be secured for the crop. Our prices are F. O. B. Minneapolis and include bags. ¼ bu., 75c; ½ bu., \$2.25; 2 bu. @ \$2.15; 10 bu. @ \$2.10; 100 bu. @ \$2.05. Write for special prices in larger quantities.





Harvesting Minnesota No. 169 Wheat in Minnesota.

SPRING WHEAT PEDIGREED STOCK

Prices. We are obliged to ask a considerable advance over the market price for our High Grade Seed Wheat, as there is a very much larger cost attached to its production and preparation than any one who has not had the experience could possibly appreciate. Space does not permit of going into detail, but, as a matter of fact, the prices named below for the larger quantities represent but a slight advance over the actual cash outlay to us. We believe that farmers who want to change their seed will find it very much to their advantage to secure enough, at least, to give them a start.

Northrup, King & Co.'s Sterling Red Fife

Spring Wheat. (Sold only in sealed bags.) This variety of wheat has been selected, bred and grown by us and has attained such high quality that we feel it is justly entitled to be called "Sterling." All who see this wheat, both the grain and while growing, compliment us on its superior value and fine appearance. It is as nearly pure as wheat can be and by cross breeding we have produced a healthy strain, which goes far in increasing the yield and reducing the damage by rust and other enemies. This is the variety which furnishes No. 1 Hard Wheat. It is the best selected stock of the wheat which has made Minneapolis flour famous all over the world, and is undoubtedly the finest stock of the finest milling wheat in existence. This is a beardless variety. The kernels are hard and flinty and make the very best grade of flour. We receive a great many letters every year, similar to the one below, confirming all the claims we make for this wheat.

The Best Variety for this Locality.
Last season I planted on my farm 30 bushels of your Sterling Red Fife Spring Wheat, from which I raised 578 bushels of grain. I consider this the best variety for growing in this locality. I have always been pleased with the seeds received from your house. CHESEBRO SMITH, Fargo, N. D.

Price of Northrup, King & Co.'s Sterling Red Fife Spring Wheat. Lb., 20c, postpaid. By express or freight, $\frac{1}{4}$ bu., 80c; bu., \$2.15; 2 bu. @ \$2.10; 10 bu. @ \$2.00. Bags free.

Minnesota No. 163 Fife Wheat. Of the many crosses obtained within the past few years, the one sent out by the Station as Minnesota No. 163 takes a high rank. The heads are long, well filled with medium sized, plump kernels. Flour made from this variety shows a higher gluten test than most sorts. The straw is medium height, very strong and wiry. At the Station farm this variety averaged two to five bushels an acre, more than the Fife and Blue Stem varieties. The average yield of Minnesota No. 163 Wheat for the past 13 years has been 26.4 bushels an acre.

This tells a story which should interest every intelligent grower of Spring Wheat. Our crop was grown in North Dakota on land which had not grown wheat for a number of years, and is very pure. This is a beardless variety. By freight or express, at purchaser's expense, $\frac{1}{4}$ bu., 75c; bu., \$2.30; 2 bu. @ \$2.20; 10 bu. @ \$2.15. Bags free.

Fancy Fife Spring Wheat. Being located in Minneapolis, the largest wheat receiving market in the world, we are enabled to select from the many hundreds of cars arriving here daily, some fancy lots of Fife wheat, which when properly cleaned and purified by our special machinery, make very satisfactory seed. It is not, of course, as desirable as the varieties grown especially for seed purposes, but where price is the main consideration this wheat will meet the requirements. In buying these lots we select those which grade high on the market, are plump and heavy, of good color and fine appearance. In carload lots we can make special prices, which will vary with market fluctuations in value. Write for samples and prices on large quantities. Price, $\frac{1}{4}$ bu., 65c; bu., \$1.85; 2 bu. @ \$1.75; 10 bu. @ \$1.70. F. O. B. Minneapolis. Bags free.

NORTHROP, KING & CO.'S MINNESOTA RELIABLE WINTER WHEAT

Sold only in Sealed Bags.

The yield of Winter Wheat an acre is on the average very much larger than any of the Spring Wheats. Winter Wheat has not been extensively grown in Minnesota and the Dakotas until recent years, on account of its inability to withstand the severe winters. Since the introduction, however, of Minnesota Reliable Winter Wheat this has gained the attention of all Winter Wheat growers and the Experiment Stations and is recommended above all other varieties. There has not been a season in 23 years in which this variety has failed to endure the severe tests to which it has been put, including unfavorable weather during fall and spring months. Minnesota Reliable Winter Wheat is very early, ripening before rust, blight, chinch bugs or other insect pests appear. It yields from 30 to 40 bushels an acre and sometimes more on good soils. In quality, it equals the

Minnesota No. 169 Blue Stem Wheat. In this we offer the second new wheat originated at the Experiment Station. It is a progeny of Haynes' Blue Stem. Its average yield for four years as compared with the parent variety, is given by the Experiment Station as follows: Haynes' Blue Stem, 22.5 bushels an acre. Minnesota No. 169, 28.3 bushels an acre.

This comparison with its parent, which is a superior variety, tells the whole story as to yield. This is the best Blue Stem Wheat of which we have knowledge. It has given an average yield during 14 years, through favorable and unfavorable seasons, of 26.7 bushels an acre. No better wheat for Minnesota and the Dakotas is grown. In quality it proved in milling tests equal to the best. This variety has no beards. $\frac{1}{4}$ bu., 75c; bu., \$2.25; 2 bu. @ \$2.15; 10 bu. @ \$2.10. Bags free.

Fancy Blue Stem Wheat. Our location here on this, the largest wheat receiving market in the world, places us in a position to select many carloads of nice Blue Stem Wheat which when graded and purified in our special machinery, makes good seed for seeding large areas. When a change of seed is desired and the buyer does not wish to invest in our selected seed wheat, this Fancy Blue Stem will give profitable returns. We believe it to be as clean and pure as any wheat can be which has not been especially grown for seed, and is much better than some that is so offered. Price $\frac{1}{4}$ bu., 60c; bu., \$1.80; 2 bu. @ \$1.70; 10 bu. @ \$1.65.

Velvet Chaff Wheat. This is a bearded, smooth chaffed variety, very hardy and a big yielder. In some sections of Minnesota it yields from two to ten bushels more per acre than the Blue Stem. It is early in maturity, from 110 to 115 days. It is being bought on the market at a price, slightly less than that paid for other wheats. The Minnesota Experiment Station reports a 14 year average yield of 26.7 bushels. $\frac{1}{4}$ bu., 60c; bu., \$1.85; 2 bu. @ \$1.75; 10 bu. @ \$1.70. All prices on wheat subject to changes in value.

Macaroni or Durum Wheat. Sent out by the United States Department of Agriculture under strong recommendation as to its great value for semiarid lands where good crops of Spring Wheat could not ordinarily be produced, has more than justified every claim made for it. The acreage of this variety is increasing every year in spite of the opposition of some millers. It out yields by far any other variety of Spring Wheat, and it has been demonstrated that it makes bread superior to that made from the best Fife Wheat flour, and has proved to be practically immune to the dreaded rust. In growing it resists extremes of weather, which no other wheat will endure. It is now being received in the Minneapolis market (the largest wheat receiving market in the world) and sells readily at a price slightly under the very best Fife Wheat.

In the field this wheat grows very strong and with surprising rapidity, so rapidly as to get well ahead of the weeds. It does not shell or bleach and is also hail proof owing to the tightness of the hull. The straw is very strong. Price, $\frac{1}{4}$ bu., 70c; 1 bu., \$2.10; 2 bu. @ \$2.05; 10 bu. @ \$1.95. Special prices in large quantities.

What Our Trade Mark Means.

Our Sterling Bag Trade Mark is used to brand only those varieties of seeds which we can especially recommend to our customers. A variety so marked will be found the best of its kind in every instance. We use this method to designate our specialties. Northrup, King & Co.'s Sterling Brand Seeds have proved by careful test superior in purity, germination, productiveness and hardness. They comply in every respect with the pure seed laws of all states.



well known No. 1 Hard Fife Spring Wheat and commands a premium from millers.

It is a bearded variety; the kernels are red with a very thin husk, are hard, flinty and very rich in gluten. It is stiff-strawed and will stand up in wind and rain which would lodge some varieties very badly. Reserve your seed supply by ordering now, for new crop seed in the fall. Price, $\frac{1}{4}$ bu., 65c; bu., \$1.90; 10 bu. @ \$1.75.

Turkey Red Winter Wheat. A standard, red, bearded wheat heavy cropper. Price, for fall delivery, $\frac{1}{4}$ bu., 65c; bu., \$1.90; 2 bu. @ \$1.85; 10 bu. @ \$1.75.

All prices on grass and field seeds subject to market changes.



BARLEY



Experimental Plots of Barley.

CULTURE. Preparing the Soil. To produce large crops of any grain the ground must first receive proper preparation to receive the seed and this is especially true of barley. The more time and attention that is given to preparing the soil, the larger will be the yield.

Make the soil fine and firm with the use of the best tillage implements. Even good seed cannot do its best in soil that is low in fertility. It is suggested, therefore, if your soil is not in prime condition, that a fertilizer be added.

Sowing the Seed. Early seeding usually produces the best yields. However, barley is a crop that often succeeds well when sowed about corn planting time. Use a drill, planting the seed about two inches deep. Two bushels of seed per acre is the amount usually sown. Barley makes an excellent crop to follow corn that has been grown on clover sod. When thus sown, disk ground before plowing and again immediately after. This will prevent the formation of clods in the soil and make a good seed bed. Roll and harrow after seeding if the soil is loose.

Harvesting. Barley should be harvested before the grain is over ripe to insure a bright, white berry of high quality. Bind into small bundles with the bands well below the heads of grain. Shock at once, placing only 6 to 8 bundles on end with one for a cap or cover. Set the bundles so nearly upright that they will readily shed rains. Stack or house the barley as soon as possible after the bundles are dry and the grain cured. The quality of the grain will improve while in the stack or shed. Great care, however, must be exercised to prevent heating which will injure and possibly destroy germination.

Threshing. Thresh so closely that all beards will be separated from the grain. Store in dry, well ventilated bins. Bright, sound barley always commands the highest price on the market both for feeding and malting purposes.

Prices. On account of the low prices we ask for barley this season, all growers should take advantage of the opportunity to change seed, remembering that grain grown from good seed commands a higher market price.



Pedigreed Manshury Barley.

(Sold only in sealed bags.)

We believe this to be as fine a barley as was ever offered the farmers of the United States. Pedigreed Manshury Barley represents the combined efforts of State and National Experiment Stations and private work of barley experts to produce a variety which will yield plump grains with the greatest protein content, as well as strong, stiff straw and long, well filled heads. In quality both as to feeding value and for malting purposes no other barley excels it. It yields abundantly. Those with whom the seed was placed this last season reported larger crops than with any other sort. It is early and very vigorous in growth. The straw is strong and stiff. Seldom does a field of this grain lodge. The heads are long and well filled, the grain plump and of the best quality. This barley was selected on account of its yield, its desirability as a feeding and malting barley and the ready sale with which it meets on account of its good color and value for malting purposes.

Those desiring to obtain seed to replace run out varieties which may now be growing on their farms, will do well to purchase at least one or more bags of this variety.

Each bag is sealed and branded with our name and trade mark. A full sack contains two and one-half bu. of 48 lbs. each. Price, 1/4 bu., 50c; bu., \$1.60; 2 1/2 bu. @ \$1.50; 10 bu. @ \$1.45. F. O. B. Minneapolis, no extra charge for bags.

Minnesota No. 105 Barley. For several years the Minnesota State Experiment Station has been breeding and testing many varieties of barley with a view to producing an improved sort that would lead all other kinds in the matter of yield. This ambition, the Station considers, has been realized in the new six-rowed variety here offered under the name of Minnesota No. 105. In comparative tests covering a period of several years and made side by side with the best known and most popular varieties, it has proven to be the heaviest yielder, and from any standpoint, a most valuable acquisition. Minnesota No. 105 Barley has given a nine year average of 53 bushels an acre at the Station farm. It is early, uniform in maturing and pure. Quantity limited. 1/4 bu., 55c; bu. of 48 lbs., \$1.70; 2 bu. @ \$1.60; 10 bu. @ \$1.50. Bags free.

Oderbrucker or Wisconsin No. 55 Barley.

We presume that more barley is produced per acre in Wisconsin than in any other locality. The reason for this is quite evident. In that state are located the largest breweries in the United States, if not in the world. On account of barley being one of the staple crops, the State Experiment Station of Wisconsin has given particular attention to the breeding of barley to obtain big yields, protein content and other qualities which are essential for both brewing and feeding purposes. Oderbrucker or Wisconsin No. 55 is considered the best variety of barley sent out by the Wisconsin Station. Prof. Moore declares it to be superior to the Manshury, yielding 5 to 10 bushels more an acre. The original stock of this barley was obtained in Germany by the Ontario Agricultural College, from there the Wisconsin Experiment Station procured a small supply. Oderbrucker is a stiff-strawed, heavy yielding, six rowed, bearded variety. It is about the same as Manshury in time of maturity, manner of growth and general appearance, but has a plumper kernel and weighs more to the measured bushel. Prof. Moore says: "In stiffness of straw and rust resistance it is superior to any other variety on test."

It has protein content of 15%, or nearly double the amount of protein found in many other varieties. This makes it a very valuable feeding barley, which is an important consideration with the leading farmers and stockmen, who are now appreciating more and more the value of barley as a feed for all kinds of stock, horses as well as cattle. On account of its large percentage of protein, it is also one of the best malting barleys. Lb., postpaid, 20c; by express or freight at purchaser's expense, 1/4 bu., 50c; bu., \$1.50; 2 bu. @ \$1.40; 10 bu. @ \$1.30. Bags free.

Fancy Six Rowed Barley. There are many who want seed of barley, but who do not want to pay the price necessary to ask for the newer sorts. We are usually able, from the many cars arriving in Minneapolis daily, to select good lots, which after being thoroughly cleaned by our special machinery, make excellent and reasonably pure seed. We offer same subject to market changes as follows: 1/4 bu., 45c; bu., \$1.25; 2 bu. @ \$1.15; 10 bu. @ \$1.10; 100 bu. @ \$1.00. Bags free. Write for carload prices.

Beardless Barley. Two strong features distinguish the Beardless Barley above all other barleys; first, its great yielding qualities; second, its freedom from the troublesome beard common to all other varieties except the Improved White Hullless, for it is absolutely without beard. It is on this account not only much more agreeable to handle in threshing than other barleys, but it is much safer and better to feed to live-stock. As a fattening agent for swine Beardless Barley is particularly valuable. Many young pigs are lost annually by choking on barley beards. This variety is frequently used in succotash mixtures on account of the absence of beards, and in pastures where swine are allowed to feed will be found especially valuable. Contrary to the prevailing opinion, Beardless Barley is as good for malting as any other barley, and it is being accepted by many brewers in preference to common varieties grown in some localities. Very scarce. Lb., postpaid, 20c; by freight or express, 1/4 bu., 60c; bu., \$1.75; 2 bu. @ \$1.65; 10 bu. @ \$1.55.

Chevalier Barley. This is a two-rowed variety which is very popular with many farmers. The grain commands a high price on account of its fine appearance and superior malting qualities. The heads are a little longer than the six-rowed varieties and the berry is larger. Many Canadian farmers prefer this variety on that account. Lb., postpaid, 20c; by express or freight at purchaser's expense, 1/4 bu., 50c; bu., \$1.45; 2 bu. @ \$1.35; 10 bu. @ \$1.25.

Highland Chief Barley. This is also a two-rowed variety of very fine quality. Several years ago we sent a sample of this barley to one of the largest malting firms in the United States, and they wrote us that during an experience of sixty years they had never seen such a handsome sample of barley. It is a vigorous grower and the grain is much larger than the six-rowed varieties. It is less likely to be damaged by rain than most other kinds, as it is much more closely covered with broad awns or spikelets. Lb., postpaid, 20c; by express or freight at purchaser's expense, 1/4 bu., 50c; bu., \$1.45; 2 bu. @ \$1.35; 10 bu. @ \$1.25. Bags free.

All prices on grass and field seeds subject to market changes.

IMPROVED WHITE HULLESS BARLEY

Its Valuable Properties.

IT IS HULLESS; IT IS BEARDLESS; IT IS VERY EARLY
IT WEIGHS OVER 60 POUNDS TO THE MEASURED BUSHEL
IT YIELDS WELL ON POOR LAND
IT YIELDS ENORMOUSLY ON GOOD LAND
IT MAKES BETTER PORK THAN CORN
THE STRAW MAKES GOOD HAY
IT IS OF INESTIMABLE VALUE TO STOCK FEEDERS

No barley of which we have knowledge has proved so valuable to the stock raiser as the Improved White Hulless. It is not a malting variety, but for feeding purposes there is no barley raised which can compare with it in earliness, yield and quality. It has many very valuable properties. While it has sufficient hull to hold it in the head, these hulls are readily separated in threshing. The absence of beards makes it safe to feed to all kinds of stock. Its earliness is a characteristic which is especially desirable. It will mature in from 60 to 90 days, according to soil and locality. In Montana the farmers use it very extensively as a catch crop. Those seasons in which wheat failed on account of drought, insects or disease, White Hulless Barley was sown in June and had ample opportunity to mature, provided there was sufficient moisture in the ground to start germination.

The grain is exceedingly heavy, weighing from 60 to 63 pounds to the measured bushel. The yield varies according to soil and climatic conditions, but it can be depended upon to produce from 35 to 80 bushels an acre. Its nutritive value is very great. It is fed to work-horses at the rate of 2 quarts where 4 quarts of oats would be required. The best way is to mix it with oats and grind the two together for horse feed. It is also very valuable for feeding poultry, hogs and all kinds of stock. As fattening feed for hogs it has no equal. It makes sweeter meat and nicer lard by far than corn.

It is often grown for hay, coming very early and providing rich feed. It should be cut just before it becomes ripe and while the straw is green. In this condition it is relished by all kinds of stock. The straw is stiff and straight, and seldom if ever does it lodge.

For grain
sow 1½ bush-
els to the acre;
for hay, 2 bush-
els. Prices, lb., post-
paid, 20c; by freight
or express at pur-
chaser's expense, ¼
bu., 50c; bu., \$1.55; 2
bu. @ \$1.50; 10 bu. @
\$1.45. Bags free.

Heads of White

Hulless Barley.

SPELTZ OR EMMER

FACTS ABOUT SPELTZ.

IT RESISTS DROUGHT;
IT THRIVES ON POOR LANDS, IN STONY GROUND,
IN FOREST REGIONS, ON THE PRAIRIES;
IT MAKES A CROP WITH ALMOST ANY CONDITION OF
SOIL AND CLIMATE;
ENDURES A GREAT DEAL OF FROST;
IS NOT READILY DAMAGED BY HARVEST RAINS;
IS NOT SUSCEPTIBLE TO RUST OR SMUTS;
YIELDS MORE THAN OATS, WHEAT OR BARLEY;
MAKES BETTER FEED THAN BARLEY;
MAKES EXCELLENT FLOUR;
THE STUBBLE MAKES GOOD FERTILIZER;
STOCK EAT BOTH GRAIN AND STRAW;
RIPENS VERY EARLY.

Speltz has now been grown in the United States in a large way for several years and each succeeding season not only emphasizes its value, but sees its production increasing to an enormous extent. It is found to be adapted to a wide range of soil and climate, to resist extremes of weather, to be of excellent feeding value and to yield so much more heavily than oats and barley as to insure its increasing popularity and its eventual place among the leading and standard cereal crops of the world. Those who have not grown Speltz should not let another season go by without giving it a place and an important place, too, on their farms.

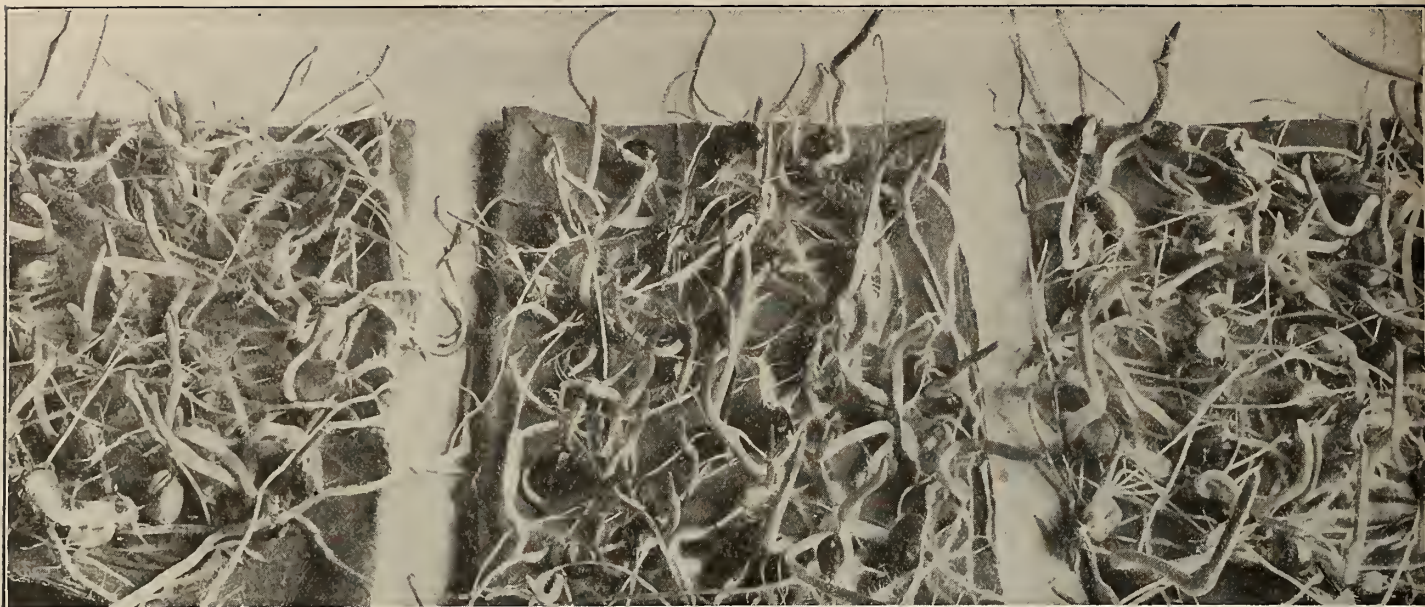
It is readily eaten by all kinds of stock and has shown itself to be especially adapted when fed to milch cows. It is better to mix it, however, with bran and shorts as it is a pretty heavy feed when fed alone. As a swine feed, we think very well of it indeed, especially for brood sows.

Horses do well on it, but it is not equal to oats in that case. Its most striking value is found in its drought-resistant qualities. Drill two bushels per acre.

Price, ¼ bu., 35c; bushel of 40 lbs., \$1.00; 3 bu. @ 95c; 10 bu. @ 90c. Bags free. Prices on grass and field seeds subject to market changes. Red Figure Price List mailed at any time upon request.



Heads of Speltz or Emmer.



A Photograph of Three Germination Tests of Our Seed Corn. The Strong Growth of Both Sprouts and Roots Indicates Healthy, Vigorous Seed. Our Orders are Filled with Corn of this Character.

A HISTORY OF CORN IN THE NORTHWEST.

It may be of interest to corn growers to learn of the rapid development of field corn in the northwestern states during the last thirty years.

The production of corn in Minnesota alone for the year 1914 reached the immense total of 120,613,673 bushels raised on 2,763,430 acres. This yield is more than 9 per cent greater than 1913, over 51 per cent greater than in 1912, 57 per cent greater than 1911 and nearly 80 per cent greater than 1910.

Minnesota is coming to be recognized as one of the great corn states of the Union. The average yield in Minnesota is greater than that of the old states in the corn belt, Illinois, Indiana, Missouri, Kansas and Nebraska. By way of comparison, we find in the first catalogue issued by Northrup, King & Co. in the year 1884, the following varieties of corn: Longfellow Flint, Early Canada Flint, King Philip Flint, Compton's Early Flint, Pride of the North Yellow Dent, Early Favorite Yellow Dent, White Minnesota Dent. This list practically covered the available varieties at that time and these could be grown with success only in the southern portion of Minnesota, South Dakota and southern Wisconsin. Recognizing the lack of acclimated varieties, it at once became the aim of this firm to improve, breed and select seed corn which could be safely grown throughout the Northwest. This work we persistently and faithfully carried on year after year, gradually working the corn a little farther north each season until now there are some of our varieties which may be successfully grown across the border in Canada.

North Dakota is today in the corn belt while twenty-five years ago practically no corn at all was produced there. The state is now placing on the market millions of bushels of first-class corn.

Our early varieties of corn are now being successfully raised in the foothills and valleys of Montana and our trade on this article in Canada is increasing each season. We have introduced and named all but three or four of the standard varieties of seed corn now planted in the Northwest.

How We Grow Seed Corn.

The extent of our trade in seed corn has reached such enormous proportions that it may be of interest to those who purchase from us to know how large quantities of seed are scientifically produced. Our acreage is so large that it would be manifestly impossible for us to own and control all the land necessary. We make contracts with the most reliable farmers, selecting those owning good farms which are properly handled; men who will work under our instructions.

The ground must be properly prepared under our direction, must be plowed and harrowed as we instruct and the seed which we furnish, planted in the proper manner. We do not grow different varieties of seed corn closer than a quarter of a mile, so as to avoid all liability of mixing by the wind carrying the pollen from one field to the other. The corn is frequently cultivated and as soon as the tassels appear we send men into the fields to remove same from all barren stalks. This will produce seed which has a tendency to large yields and the production of ears on every stalk. This work also prevents the condition which is too often seen in a field of corn, that is, a hill with two or three non-productive stalks. A graphic illustration of this point is outlined elsewhere on this page.

When the corn is properly matured, it is harvested under our direction and placed in wire cribs which are exposed to the air so as to thoroughly cure under normal conditions. Before the arrival of freezing weather the corn is taken into our warehouse where the curing process is completed. Before we receive the corn it is sorted twice; once when it is husked and again before it is shipped to us. A third sorting is afterwards made before the corn is shelled. This insures the very best corn produced on each field. This selection is so thoroughly done that we save on an average only eight to ten bushels to the acre for seed.

After the corn is shelled, it is thoroughly recleaned by our machinery. Every lot is then tested for germination and no seed corn is allowed to leave our hands which does not show a satisfactory test.

The Selection of Seed Corn.

The system of improving seed corn by first generation hybrids is discussed on the opposite page. Our limited space will not permit going into all of these matters in detail but we wish to comment on ear to row selection.

In one of our exhaustive tests we devoted about seven acres to corn planting a single ear to each row. No less than 225 rows were thus grown and careful observations and records taken. These rows will invariably display certain traits of individuality and frequently there will be considerable contrast with other rows similarly planted. Some rows are fairly uniform in

the size and type of ear. Other rows will bear many nubbins and some good ears. Thus there will be a considerable difference in the yield, one row compared with another. These rows all bear marks referring to the parent ear. When the corn becomes ripe, each row is husked separately and the corn weighed. From the best rows we are able to save the best corn for the next breeding plot and in this way select the highest yielding corn, that which is most true to type and has all of the individual characteristics of the mother ear.

What the Individual Ear Will Produce.

In our trial grounds one season we planted in a plot by itself practically all of the kernels on an individual ear. As soon as earing time came, we went through this plot and counted 246 stalks. Of this number 182 gave promise of producing a normal ear. The balance of 64 stalks bore either nubbins or no ears at all. In other words, this particular ear produced only 75 per cent of stalks which would be considered of any value. Comparing this with some of our high-bred seed corn which was growing in an adjacent field, we found on counting the stalks that 94 per cent bore fully matured ears and enough bore two ears to the stalk to bring the average up to 100 per cent. It is such corn that every grower wishes to plant.

It costs as much to plant and cultivate a corn field with a 50 to 75 per cent yield as it does one which produces 75 to 100 bushels per acre. The cost of the best seed corn obtainable is only 30c to 40c more per acre than ordinary crib corn. Why should one hesitate to buy the best?

How Good Corn Increases Land Values.

Ten years ago we began growing our corn for seed in a new locality about fifty or sixty miles northwest of Minneapolis. At that time the average yield of corn in that locality under ordinary conditions was about 25 bushels per acre and the best land obtainable could be purchased for about \$60 per acre. Our corn growing department, with their experts, after instructing the farmers how to take care of their fields and supplying our high grade seed corn raised the average yield in that locality to 50 to 75 bushels per acre. When farms are sold there now, which is rather infrequently, they bring up to \$125 per acre.

Now what does all this indicate? First, that good seed has much to do with the yield; and second, that by proper care of the land, combined with good seed, larger and better crops can be raised, thus increasing land values.

A Chance for the Boys and Girls.

The corn crop of the northwestern states has become of such importance that corn clubs have been organized in a great many localities for the purpose of aiding members in growing corn, of exchanging ideas and disseminating information which members demand. The boys and girls also have been offered thousands of dollars in prizes for the largest yields on an acre of land. As this is written, we learn that North Dakota has been unusually successful in these acre yield contests for boys and girls. There is being held on this day, November 28th, at Benson, Minn. a great Corn and Alfalfa show under the auspices of the West Central Development Association. The boys and girls in the nineteen counties represented are turning in their reports for the yields they have secured and the contestants will be awarded prizes according to what each has accomplished. These prizes range from \$5.00 up to \$200.00 each and the yields will range from 45 to 135 bushels per acre.

It is worth while for any boy or girl to show what can be done under scientific methods. In 1913 the sweepstakes prize was won by Lynn Harrison of Excelsior, Minn. He raised 133.90 bushels on one acre at a cost of 23½¢ per bushel. The yield of dry corn was 103.24 bushels per acre. This boy was only fourteen years of age.

We urge the boys and girls to go into these contests. We say girls too, for Edna Rycher of Stewartville, Minn. won the second prize in the Minnesota acre yield Corn Contest. Her yield was 99.58 bushels, produced at a cost of less than 16¢ per bushel. The yield of dry corn was 86.04 bushels per acre. This remarkable showing by a 15 year old girl is more than double the yield of the state average for Minnesota.

The results of the 1914 Contest were not known at the date this was written but are sure to indicate further remarkable yields.

Even though the contestants do not win a prize, the assistance which they will secure under the direction of those in charge of the contest, will more than repay them for their effort. These yields are usually secured under average farm conditions and indicate the possibilities when good seed, good soil, good cultivation and good boys or girls show what they can do.



WHAT IS A BUSHEL OF SEED CORN WORTH?

"The inherited quality of corn to yield heavily or poorly all comes in the ten pounds, more or less, of seed planted."—W. M. Hays.

The Three Ears.

"The photograph shown below illustrates what is too often seen in a single hill—a good ear, a poor ear and a nubbin. We have seen this so often that we never stop to think what it means. Why do not all these stalks bear ears like No. 1? Being in the same hill, the condition of soil, climate and moisture must have been exactly the same. One could not have received more thorough cultivation than another; from the time the corn was dropped there was no good reason why Nos. 2 and 3 should not be as good as No. 1. Why, then, is there this wide variation?

Can we do anything to bring Nos. 2 and 3 up to the standard set by No. 1? We can. The difference in yield of these three ears was not due to differences in soil, climate or cultivation. The difference lay behind all this—it lay in the character of the parents planted."—Prof. Holden, in the Farmer's Voice.

The Difference in Seed Corn.

Read This.

Prof. Holden, formerly of the Iowa Agricultural College, one of the highest authorities on improved seed corn in the United States, planted 100 samples taken from the corn planters in the fields of 100 farmers in the vicinity of Ames, Iowa. All were given the same care and cultivation, being planted in trial fields on the College Farm and Sub Stations in various parts of the state. The variation in yield was a surprise to all, as some of the corn produced less than 20 bushels an acre, while other lots yielded almost 100 bushels. This wide difference was all in the seed. The land and method of culture were identical. "The expense of growing an acre was the same. The best seed produced fully four times as much corn, of better quality, than did the other lots of inferior corn."

Why This Great Difference?

The last statement (which is Prof. Holden's, not ours) shows a difference in yield between the poorest and the best, grown side by side under precisely the same conditions, of 80 bushels to the acre, and, making due allowance for difference in varieties, is to be accounted for in no other way than that the best seed possessed inherited tendencies so fostered and fixed by intelligent care that big yields were the perfectly natural result. The poor yields were due to an inherited tendency, furthered by neglect, to produce nubbins and barren stalks.

Seed Corn Improvement.

We call particular attention to the work we have carried on for some years in the line of seed corn improvement; by scientific selection, breeding, cultivation, detasseling, etc.

An old theory revised:—The United States Department of Agriculture in bulletin No. 191, advocates the use of first generation hybrids for the increase of the yield of corn. This theory was first advanced by Prof. W. J. Beal of the Michigan Agricultural Experiment Station as early as 1876, but his work in this direction was not commonly accepted by corn growers until more recently. The plan is as follows:—

First Generation Hybrids.

Seed of one variety of seed corn is planted, in alternate rows with seed of the same variety which, however, was grown in an entirely different locality than the first lot. By introducing these two parent varieties belonging to entirely different families, a largely increased yield is the result. Farmers, generally, thoroughly understand the folly of inbreeding their stock. It is reasonable to presume, and has been proved true that the same result will follow from inbreeding corn year after year. By numerous and careful experiments it has been demonstrated that the increase in the yield does not follow in the second, third, or any subsequent generation, that this work of hybridizing must be pursued each year. It is just such work as this that we have and are doing in our fields for the higher development of seed corn. To further reduce the percentage of nubbins and barren stalks, our fields are carefully detasseled.

Cultivation.

In the cultivation of our fields of corn we use surface working Cultivator Sweeps. The advantages of these Sweeps are many. They may be attached to any cultivator. They work entirely on the surface of the soil, producing an ideal earth mulch, leaving a level surface on the field and do not injure the roots of the corn. Soil moisture is conserved and the plants are not retarded but hastened to maturity.

When deep working cultivator implements are used the upper roots are severed, causing a delay in growth until new feeders have formed. It has been proved, beyond a doubt, that our corn crop was saved from loss in some sections because these surface working Sweeps were used, placing it out of danger before frost.

Cost of Seed.

People frequently write us that they would like to buy seed corn from us, but cannot because the prices are too high. The average price of our seed corn is less than \$2.75 per bushel, including bags. The extra work, as described above, is only a small part of the cost of growing our seed corn. But a very small portion of the yield is saved for seed. The crop is carefully hand-picked three times before shelling and from eight to ten bushels of corn per acre is all that is used for seed. The difference between our cost and the selling price leaves but a small margin of profit. The average planter has neither the facilities nor the knowledge for carrying on this scientific work, and were it not for the fact that we grow thousands of acres, we could not afford to sell seed corn at the prices we ask for it.

Is It Worth It?

A bushel of seed corn will plant from six to eight acres. To use our seed, will cost, say, thirty to forty cents an acre more than if common crib or home grown corn is planted. It is therefore evident that if our seed produces one bushel more to the acre, mind only one bushel more, than the home seed, that the entire cost of the seed and freight is paid for by this extra yield. As was noted by the statement of Professor Holden above, if this extra yield ranges from twenty to eighty bushels per acre, it demonstrates the wisdom of planting the best seed. It is therefore evident that if seed corn was worth \$10.00 a bushel, it would be cheaper to plant such seed than to use common corn as a gift.

Again, Is It Worth It?

The corn we sell is grown from seed which has been brought to such a degree of perfection as to render it of great value. It represents the labor of many years and an expenditure of a very large sum of money. It has behind it the history of big crops. We know that when we plant it, barring flood or drouth, it will yield heavily. Is this care worth thirty cents an acre to anyone planting corn?

Our Corn is Northern Grown.

We regret to say that a great deal of Nebraska, Iowa and even Missouri corn is planted each year for Northern Grown Seed. The term "Northern Grown" is somewhat indefinite, and advantage is taken of this to deceive. With us "Northern Grown" means

That every bushel of our seed corn offered herein, except as otherwise stated, is grown in Minnesota.

While in unusually long seasons the earliest varieties of Nebraska and Iowa grown seed will some times mature in the Northwestern States, it is as a rule about thirty days later than Minnesota Grown Seed. We cannot believe that any intelligent farmer in the Northwest will knowingly plant Southern seed when for a few cents an acre more he can secure true and reliable planting stock that will mature. Southern corn is handsomer and largerkerneled than Northern corn. Thousands of bushels of this late corn have been unknowingly seeded by Northwestern farmers. Those who want early maturing corn should buy nothing but true Northern Grown Seed and absolutely know that they are getting it.

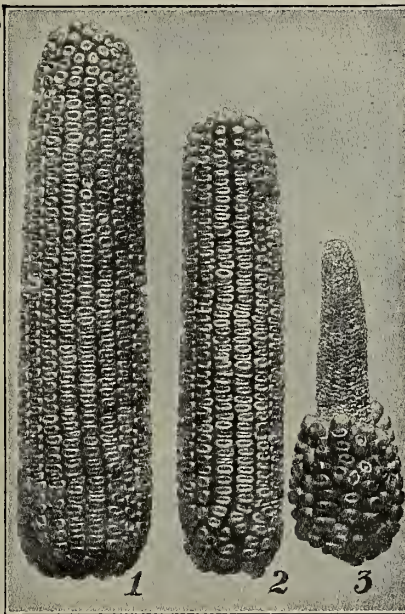
Prices.

Values on seed corn are those in effect as we go to press, and are subject to changes in price. Our Red Figure Price List enclosed gives prices on the day the catalogue is mailed.

Germination.

We thoroughly and carefully test every lot of corn before it is sent out to our customers. The average test of the corn which we shipped last season was very satisfactory. We mark the germination on every bag before it is shipped. Many of the tests showed germination of 100 per cent. Never in the history of our business have we had better seed corn than that which we now have in store.

Our improved methods of gathering, curing and storing insure maximum results, but wherever you may buy your seed corn you should know for yourself that it grows before you plant it, and for your own satisfaction suggest that you test seed before sowing.



The Product of a Single Hill.

Corn Insurance

There is no man owning a home but sleeps more soundly at night from the feeling that it is insured.

Farmers who plant our Minnesota grown seed corn, are to a large extent INSURED.

Those are anxious days for the farmer when, with a crop in sight, he is wondering whether early frosts will not catch his corn.

Five or ten days in the latter part of the season are often CRITICAL DAYS.

This anxiety and risk may be greatly lessened by planting NORTHROP, KING & CO.'S MINNESOTA GROWN SEED.

A VAST AMOUNT OF MONEY would be saved to the country every year if all Northern farmers would use our seed corn.

IT IS NORTHERN GROWN.

IT IS AIR-DRIED.

IT IS TESTED.

WHERE OUR SEED CORN SHOULD BE PLANTED.

We recommend our varieties of seed corn for all high latitudes, and for those climates and in those cases where it is desirable that corn should mature in from 80 to 120 days.

OUR PRICES.

Enquirers sometimes write us that our prices on seed corn are "too high." A bushel of seed corn will plant from six to eight acres. To use our seed will cost, say, 30 cents an acre more than if common crib or ordinary home grown corn is planted. It is therefore evident that if our seed produces one bushel more to the acre, mind, only one bushel more than the cheaper seed, that the entire cost of the seed and freight is paid for by this extra bushel, leaving any additional yield as profit.

Planters are fast learning that it pays to use the best seed that can be grown. We hope to see the time that, when field corn is worth 50 cents a bushel, we can consistently ask \$5.00 a bushel for our seed corn and we expect that our successors in business will see the time when \$10.00 a bushel will be a reasonable price for the right kind of seed.

This will come when corn growers not only realize that their crop depends upon the ten pounds more or less of seed planted to the acre, but when they will pay the price that will enable the grower to spend the time and money necessary to make seed corn all that it should be. It is

GOOD POLICY

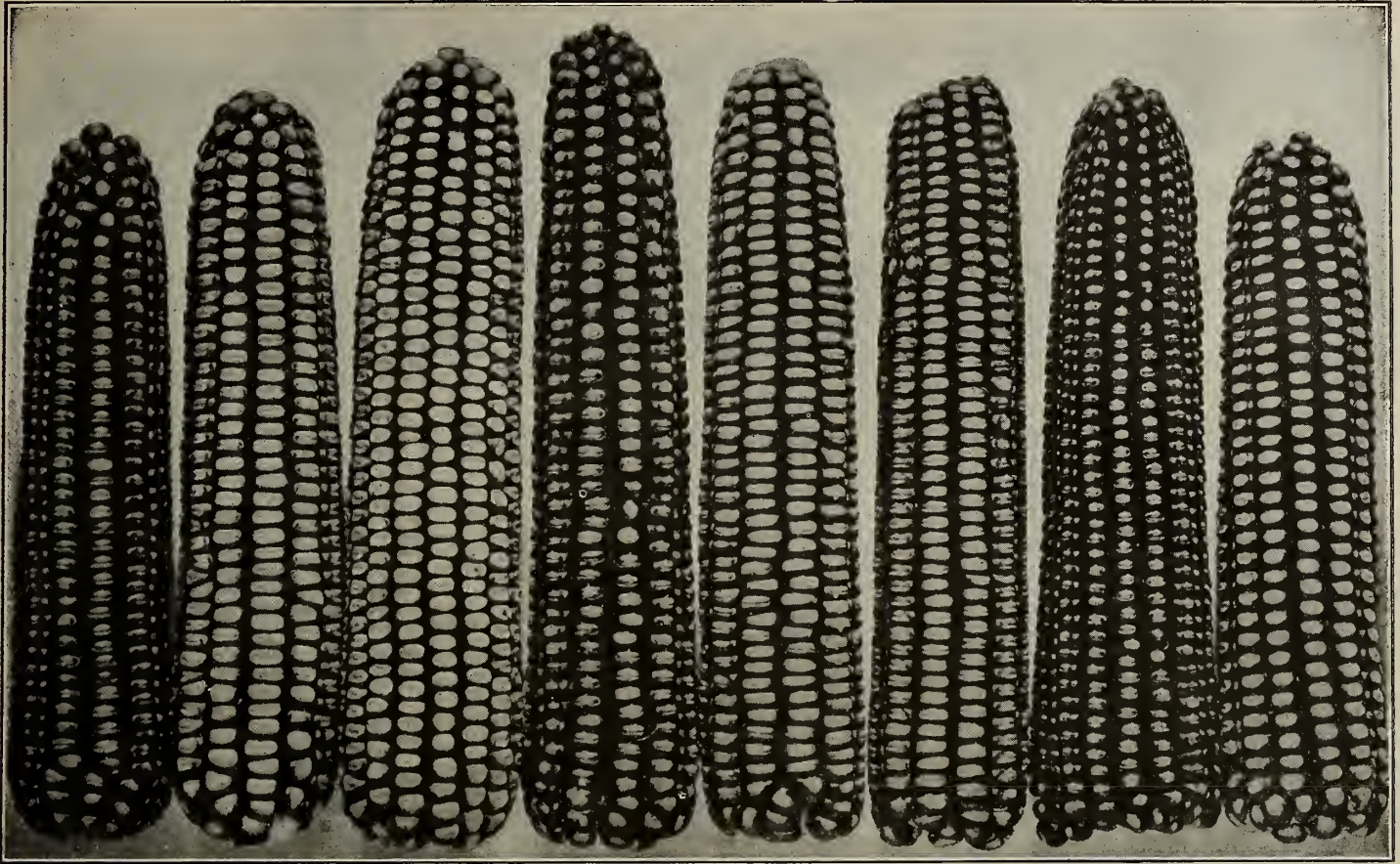
to consider the following facts:

Every year much Southern Corn is sold as "Northern Grown Seed Corn".

Require a DIRECT STATEMENT from whomever you may purchase seed corn for northern planting, as to WHERE IT WAS PRODUCED.

Take no chances as to this.

NORTHRUP, KING & CO.,
Seed Corn Specialists.



Typical Ears of Northwestern Dent Corn, The Earliest Dent Corn Grown.

EARLY NORTHWESTERN OR SMOKY DENT CORN

The Earliest Dent Corn for the Northwest.

This corn is in a class by itself having red kernels with a yellowish cap, being a cross between a red flint and a yellow dent, but the type has become well established. To some the color is objectionable, but it must be taken into consideration that in most parts of North Dakota, Northern Minnesota, Northern Wisconsin and even Canada this is the only variety upon which the grower may depend to ripen and it is far better to have corn, even though it is red in color, than to have no corn at all. In North Dakota, northern Minnesota and in high altitudes this variety can be relied upon to mature before any other dent corn, and, in fact, is the only sort to ripen in some seasons. No other one variety is as extensively grown in North Dakota as our Early Northwestern Dent, for the reason that season after season it successfully yields a good crop. The seed we offer is all Minnesota grown, every bushel having been produced north of Minneapolis, under our personal supervision and from own selected seed stock. It is especially adapted for planting in the far north and our sales of this variety in the northern sections of North Dakota, Minnesota, Wisconsin, Montana and even Canada reach enormous proportions. Not only is it grown in the localities named but for late planting or replants it is especially desirable. It is extremely early and quickly adapts itself to new soil and climatic conditions. We have harvested 75 bushels to the acre and gathered seed from the crop in as many days, a strong tribute to its earliness and productiveness. As a rule, under ordinary corn growing conditions, Northwestern Dent will mature in 85 to 90 days, and under more favorable soil, cultivation and weather will mature much earlier. The ears are of good size, from seven to ten inches long, and bear 10 to 14 rows of corn. Under ordinary conditions the average height of stalk is 7 ft., 8 in.; average distance base of ear from ground, 3 ft., 5 in., thus admitting the use of a corn harvester. Early Northwestern Dent may be sown in check rows or in drills. The latter method is in favor in many localities. The stalks, being smaller and shorter than some of the later sorts, may stand close in the row, thus contributing to a heavy yield. Notwithstanding the small ear, yields of seventy to eighty bushels per acre are not uncommon.

This sort is also much grown for fodder and silo purposes on account of its earliness and adaptability. It will, of course, give best yields on a fairly rich soil. We have a very fine stock of seed on hand at present, but we wish to remind our customers of conditions which frequently develop during the season. Stocks of seed often become exhausted very early and prices advance as the scarcity becomes apparent. It is desirable therefore, in your interests, to place your order as soon as possible, the earlier, the better. During the spring of 1912, seed corn of all kinds was extremely scarce. The crop of 1911 was very large, but unfavorable weather during the fall made it impossible to properly cure the seed. As a result the average germination of seed corn was very low, and lots which were of good growth found ready sale at ten to twelve dollars per bushel. While we do not anticipate the same conditions to prevail again, there are frequently other unforeseen circumstances which cause a shortage of seed or a sharp advance in prices.

Large pkt., 10c; lb., 20c, postpaid. By express or freight at purchaser's expense, ¼ bu., 80c; bu., \$2.50.

Our Red Figure Price Lists will be issued from time to time as changes in prices demand. All offers are subject to goods remaining unsold and changes in price. The best plan is to send your order as soon as you receive our catalogue.

Wins The Silver Cup.

While on a trip east, I bought some Early Northwestern Dent Corn from you last fall, and I know you will be interested in knowing that corn grown from that seed was the winner of the first and second prizes for twenty-five ears, in Wibaux County this fall where there were about forty different kinds of corn. I won the silver cup with the best bushel and second prize on twenty-five ears. Thanking you for the courteous way you have treated me and the good quality of seed you sent me.

M. J. RYAN, Wibaux Co., Mont.

See page 132 for Dwarf Essex Rape, the best supplemental hog feed to plant with corn. See pages 154 and 155 for corn and other crop fertilizers.



Part of a Train Load of Northwestern Dent Corn Grown under our Personal Supervision.



Minnesota State Experiment Station, the Birthplace of Minnesota No. 13 Corn.

MINNESOTA NO. 13 CORN (UNIVERSITY)

Extra Early Yellow Dent. (Corresponds to Wisconsin No. 8.)

The commanding points of excellence which place Minnesota No. 13 Corn at the head of all yellow dent varieties for Northern planting are:

Its earliness,

Its enormous productiveness,

Its adaptability to a great variety of soils and climates.

To Prof. W. M. Hays, formerly agriculturist at the Minnesota State Experiment Station, recently Assistant Secretary of Agriculture, Washington, D. C., is due the honor of having originated this valuable extra early yellow dent corn. Not only is it fully as early as any of the yellow dent corns, but its record of heavy yields is such as to mark it as distinctly and undoubtedly the most profitable of all the yellow dent varieties. It was the remarkable productiveness of the Minnesota No. 13 Corn that led Prof. Hays to say: "The inherited quality of corn to yield heavily or poorly, all comes in the ten pounds, more or less, of seed planted to the acre," and never was the truth of this statement better exemplified than in Minnesota No. 13. Much time and labor was expended by Prof. Hays and his staff of assistants in breeding and perfecting this strain. It was first disseminated as Minnesota No. 13 Corn, the intention being to later give it an appropriate name, but it has since become so widely and favorably known as Minnesota No. 13 that it must continue to be so known. The Directors of the Minnesota Experiment Station consider it the best yellow dent corn for Minnesota, North and South Dakota and Wisconsin; other stations agree in this opinion. Mr. John S. Cole, Assistant Agriculturist at the Brookings, South Dakota Experiment Station, says:—"At the county fair held here last week Mr. Geo. N. Kennard exhibited one bushel of Minnesota No. 13 Corn that I consider was the finest sample of yellow dent corn that has ever been displayed here. Mr. Kennard's corn was raised on clover sod and is estimated to yield from sixty to eighty bushels an acre."

The ears are of handsome appearance bearing 16 to 20 rows of bright, rich yellow, smooth, wedge-shaped kernels packed closely on the cob from butt to tip. The ears average eight inches in length and are borne usually two on a stalk. No corn excels in quality the Minnesota No. 13; the cobs are well filled and the individual kernels plump and of good color.

Minnesota No. 13 thoroughly matures in ninety days when planted on favorable soil and in a good location, but ninety-five to one hundred days places it out of danger under average conditions. A variety of corn which will show such valuable characteristics is an acquisition on any farm, especially for planting in the Northwest where early frosts are common. It may be planted as late as the second week in June and yet safely mature a crop.

Another point to which particular attention should be directed is its adaptability to changes in soil and climate. Many varieties fail to do well when subjected to new conditions or require several years to become acclimatized. Minnesota No. 13 Corn, however, will thrive and produce abundantly on most any soil and will do remarkably well under adverse conditions when other varieties would fail entirely.

The stalks grow to a height of seven feet and being leafy make excellent and very nutritious fodder. We consider this a most valuable corn to grow, as do also the various Experiment Stations we have mentioned. We refer also to those who have purchased their corn of us in the past.

We especially wish to impress upon the intending purchaser one fact, and that is the importance of ordering early. Every spring, for several years, our supply of Minnesota No. 13 Corn has become exhausted before the season was over, thus disappointing many of our customers. When the supply is gone it will be impossible to fill further orders for this variety, as we will not send out anything but genuine Minnesota grown seed corn of high germination. Large pkt., 10c; lb., 20c, postpaid. By express or freight, $\frac{1}{4}$ bu., 80c; bu., \$2.50.

All prices are subject to change on field seeds, grass seeds, corn, etc. Red Figure Price Lists are issued frequently during the selling season naming latest values.

OPINIONS OF CORN GROWERS—READ THEM.

Grew 100 Per Cent.

I bought some of your Minnesota No. 13 Seed Corn and found upon testing it that it grew 100%. That is good enough for me.

H. KETCHAM, Ramsey County, Minn.

The Best Corn in Wright County.

I am sending you a sample of what is said to be the best field of corn ever grown in Wright County. It is Minnesota No. 13 and the seed came from you.

JOHN DEWEY, Wright County, Minn.

My Corn did not Grow but my Neighbor's Did.

I purchased some Minnesota No. 13 Corn from a seed house in South Dakota last year and it did not grow, but my neighbor bought some Minnesota No. 13 Corn from you and it was fine.

WM. SINNDOWN, Brookings Co., S. D.

Last Planted and First to Ripen.

I have four acres of fine matured Minnesota No. 13 Corn. It was cut and shocked by Sept. 6th. It was surely a grand corn. I planted it the last, and it was the first to ripen.

JOHN LEVERTON, Sherburne Co., Minn.

I Thought You Were High in Price.

I grew fine corn on breaking from Minnesota No. 13 and Sterling White Dent, with drought and early frost against it. I thought last spring you were very high in price, but I would rather pay a big price for good seed and raise grain than have poor seed as a gift and raise nothing.

RUPERT D. POTTER, Bowman Co., N. D.

Ready to Cut in Less Than Ninety Days.

I bought some seed corn from you last spring—Minnesota No. 13—and it is splendid, being ready to cut in less than ninety days after seeding.

FINLEY LYON, Linn Co., Iowa.

Can Recommend Your Seeds to All.

Your seeds have given the best of satisfaction. Have bought of your firm for twenty years. If you had not been reliable I would not have patronized you so long. We were especially pleased with the Minnesota No. 13 and Minnesota King Corn, and can recommend your seeds to all.

D. M. NYE, Winona Co., Minn.

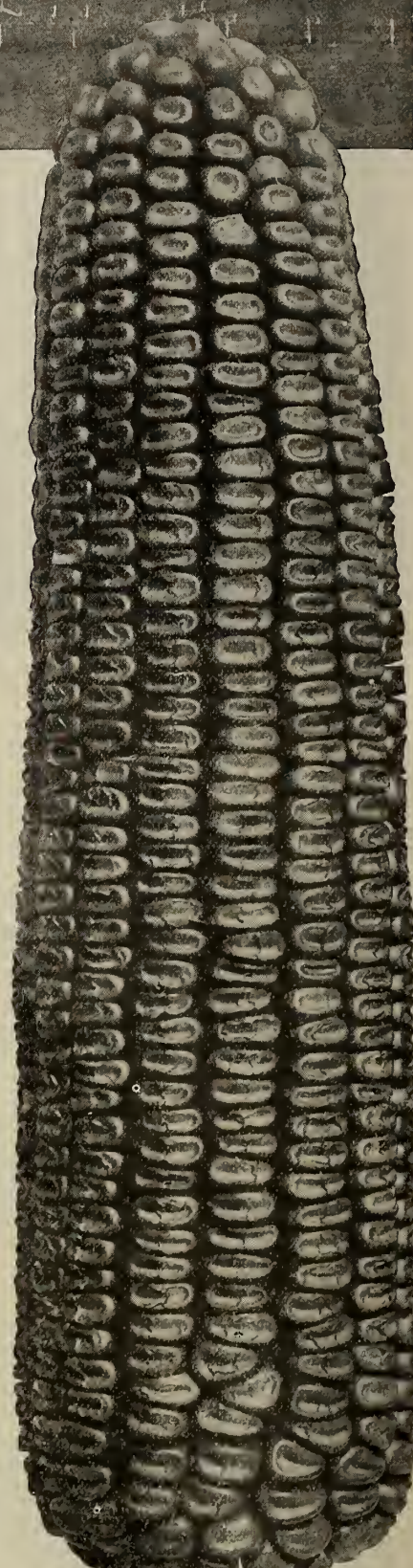
One Week Earlier Than Any Other.

We like your seeds better than any other we have tried. Minnesota No. 13 Yellow Dent Corn is one week earlier than any other variety and the ears are about nine inches long.

OLE TORGERSON, Yellow Medicine Co., Minn.

Write for Special Prices on Seed Corn in Large Quantities.

An Average Ear of Minnesota No. 13 Yellow Dent Corn.



Northrup, King & Co.'s STERLING WHITE DENT CORN

A Corn With a Record.

Pedigreed Seed Corn. like pedigreed stock, must have a record, and our Sterling White Dent Corn has a proud one. The ability of Northrup, King & Co.'s Sterling White Dent Corn to mature early and produce large crops is due entirely to its breeding and selection—work which we have conducted for many years. It is the largest eared, extra early corn grown in the Northwest, the ears averaging at husking time nearly, if not quite, one pound. The stalk attains under normal conditions a height of eight feet; the ears are about 3 ft. 8 in. from the ground, rendering it easily handled with a corn harvester; the foliage is large, healthy and makes unusually fine fodder and is one of the very best varieties for that purpose. It has given the greatest average yield of any early corn we have ever grown. In field tests with other leading varieties planted under precisely the same conditions, and given the same treatment, it has averaged a very much greater crop than any of the other varieties. The constitution of the corn is such as to resist extremes of weather to the last degree, and we offer it with the conviction that it will prove a sensation to all those who want an extra early white corn. See page 3 for illustration of a carload of this corn.

Corn for the North.

It is a great thing that Seedsmen like yourselves have done so much to make it possible to raise such splendid corn as Sterling White Dent so far north.

H. M. CROSBIE, Newaygo, Mich.

Where Northrup, King & Co.'s Sterling White Dent Corn may be Advantageously Planted.

We consider that our Sterling White Dent Corn has the widest range of usefulness and adaptability to soil and climate of any of the full dent corns. Some of the flint sorts are earlier and thus safer for extreme conditions. There are also later and larger eared sorts, which under normal conditions would perhaps more satisfactorily meet the ideas of the corn growers of Illinois, Indiana, Kansas, etc., who are accustomed to the extremely large eared and deepkerneled sorts of the South, but for the corn ground lying between the 42nd and 46th parallels of latitude and allowing for reasonable variations in time of seeding and character of soil, we know of no corn to be compared with it as a large and reliable cropper. Where weather conditions are such as to compel late planting or replanting, or where for any cause an early variety is wanted, no sort can excel our Sterling White Dent. An extra early corn that will and has yielded under good tillage in Minnesota over 100 bushels to the acre is not to be decried by corn growers anywhere and will be appreciated by the farmers of the Northwest. Large pkt., 10c; lb., 20c; 3 lbs., 50c, postpaid. By express or freight, $\frac{1}{4}$ bu., 85c; bu., \$2.75.

Took First Prize.

I took first prize at the Stevens County Fair on Sterling White Dent, and also on N. K. & Co.'s Triumph Flint raised from seed bought of you.

O. J. OPPLIGER, Stevens Co., Minn.

It is a Winner.

We have used your seeds for ten years and would use no other. I must say that we are very well satisfied. Your Sterling White Dent Corn is a winner.

HENRY SCHWERIN, Wright Co., Minn.

Minnesota No. 23 Corn.

This variety has been grown in the Northwest for a number of years. It is a white capped yellow dent corn that has been developed at the University Farm in St. Anthony Park and is strongly recommended by them.

We quote from Farmers' Institute Annual No. 23 as follows:

"The Northeastern Experimental Farm, in co-operation with Prof. C. P. Bull has conducted experimental work with different varieties of corn with a view of determining their adaptability and yield.

Minnesota No. 23 has given the most satisfactory results, and has been selected as a standard variety for northeastern Minnesota. During the season of 1910 Minnesota No. 23 yielded at the rate of 36 bushels shelled corn per acre under field conditions. Of this 80 per cent was quite well matured. It was planted May 25th and stricken with frost September 8th, giving it only 96 days growth.

The Northeastern Experimental Farm is located at Grand Rapids, Minn. which is farther north than Duluth. Minnesota No. 23 corn produces a fine appearing ear, medium to short in length and very uniform as to size. Stalks grow about six feet high and the ear is borne from 2 to 2½ feet above the ground. It may be easily harvested with a corn binder.

If Dwarf Essex Rape is sown in at the last cultivation of Minnesota No. 23 Corn the result will be a splendid pasture for hogs or cattle. Price, lb., 20c, postpaid. By express or freight, $\frac{1}{4}$ bu., 85c; bu., \$2.75. Bags free.

White Cap Yellow Dent.

We have grown this corn for several years, and, although it is very early and a great yielder, we have not liked it so well as some other sorts on account of the color of the grain, the cap of the corn being white and the balance a pale yellow. The increased demand for it, however, and the reports we receive about it, many of which are really astonishing, compel us to recognize the fact that the prejudice we have had against this corn on account of its color, was prejudice pure and simple, and that White Cap Yellow Dent Corn has come to stay and ought to stay. Our stock of this corn is invariably exhausted very early in the season, thus proving its growing popularity, as we provide an increased quantity of this variety each year. Large pkt., 10c; lb., 20c, postpaid. By express or freight, $\frac{1}{4}$ bu., 80c; bu., \$2.50.

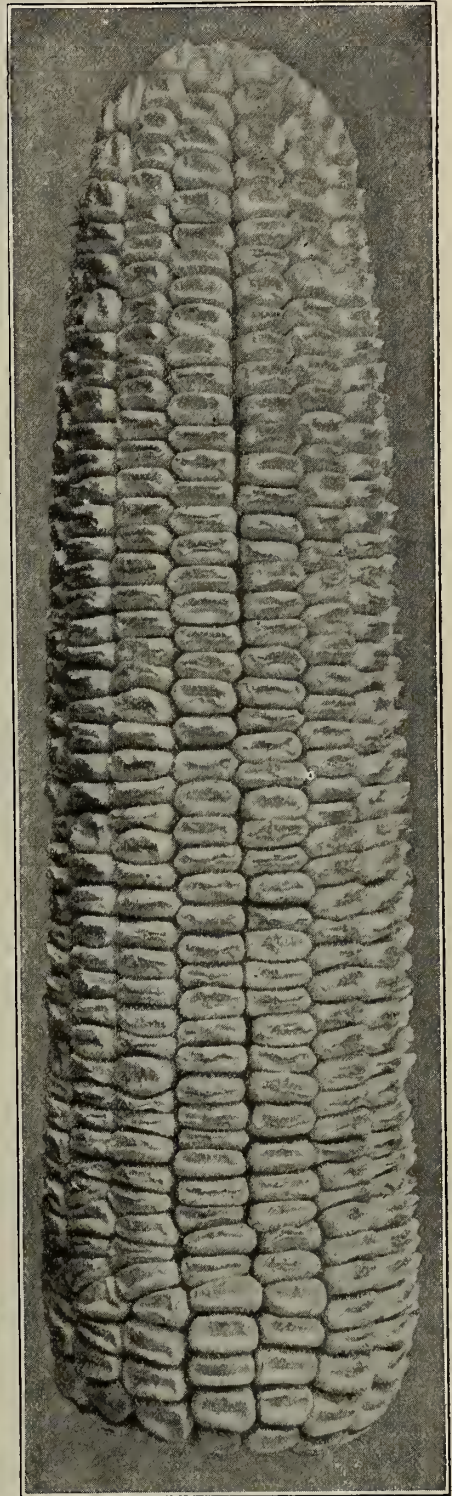
North Dakota Golden Dent Corn.

This variety is all the name suggests, an extra early, beautiful yellow dent corn. The stalk is rather dwarf in its growth; the ears are fair size and well placed, sufficiently high above the ground to admit the use of a corn binder in harvesting the crop. Golden Dent is in demand with feeders who want something to be used as a starter for stock to be fed in the pastures during the fall. This variety will make good ears when closely planted in drills. We advise the use of 6 to 8 qts. of seed an acre when drilled. Large pkt., 10c; lb., 20c, postpaid. By express or freight, $\frac{1}{4}$ bu., 80c; bu., \$2.50.

A Square Deal on Seed Corn.

The spring of 1912 will long be remembered by seed corn growers, because of the great scarcity of seed corn of good germination. The lack of vitality was caused by the wet weather at harvest time which prevented proper curing before the arrival of freezing temperature. As a result a very small percentage of seed corn was fit to plant. It was necessary for us to return many thousands of dollars to those who sent us orders for seed corn. We positively refused to send out seed of low germination, or to send Southern grown corn which would have proved a failure in the Northwest. We believe in a square deal and will never, under any conditions, impose upon a customer by foisting upon him Southern grown seed corn and represent it to be Northern grown stock. Your orders are safe in our hands.

Booklet on Field Corn. We have condensed much valuable information in this booklet on varieties best adapted for the Northwest, preparation of the land, seeding, cultivation, harvesting, and storing. It will be to the interest of every grower of corn to read this pamphlet. It will be sent free to any address on request.



Northrup, King & Co.'s Sterling White Dent Corn.
(Reduced in size.)

Greatest Corn for this State.

For fourteen years I have used your field seeds—wheat, barley and seed corn. Your Sterling White Dent Corn I regard as the greatest corn for this state. The high germination of your seeds strikes me as remarkable.

*HANS GEO. ANDERSON,
Nicollet Co., Minn.*

The Most Satisfactory.

I think I have been using your seeds since you started in business. Your Sterling White Dent Corn has proved the most satisfactory.

A. W. HALES, Clark Co., Wis.

Always Satisfactory.

The seeds which I have bought of you during the past 20 years have always proved satisfactory. Your seed corn can be well recommended for the North.

*HENRY E. VOIGT,
Hamburg, Wis.*

Write for Special Prices on Seed Corn in large quantities.



White Cap Yellow Dent Corn.

Northrup, King & Co.'s Rustler White Dent Corn



This early White Dent (14 to 18 rows) was obtained from a few kernels sent us in the autumn of 1884 by a Dakota farmer, who stated that he had matured it in that state for seven successive years; that it was the only corn in his section that could show such a record. For early ripening, great yield and compact growth of ears it is one of the best; admirably adapted to a northern climate. Average height of stalk, 8 feet; average distance base of ear from ground, 3 ft. 6 in. Those wishing a first-class White Dent Corn will find in the Rustler a hard corn to match, excepting, of course, our Sterling White Dent which is the finest and most highly selected White Dent Corn grown in Minnesota. Large pkt., 10c; lb., 20c, postpaid. By express or freight, $\frac{1}{4}$ bu., 80c; bu., \$2.60. Bags free.

Minnesota Ideal.

One of the Largest Long-eared Varieties
Grown in Minnesota.

Those who have grown this and other varieties claim that it will out-yield Minnesota No. 13 ten to fifteen bushels to the acre when grown under the same conditions of soil and cultivation.

It is a yellow dent corn of fine appearance. It has been grown for a number of years in the southern part of Minnesota and has gradually been worked north and is now safe for planting in the latitude of Minneapolis.

The stalks are stiff and strong, about 8 ft. high, and will stand well in windstorms. The ear grows from 3 to 3 $\frac{1}{2}$ ft. above the ground.

Our seed will produce uniform ears on nearly every stalk. There will be very few nubbins. This seems to be a peculiarity of this variety. Price, lb., 20c, postpaid. By express or freight, $\frac{1}{4}$ bu., 80c; bu., \$2.50. Bags free.

Minnesota Ideal Yields 83 Bushels Per Acre.

(From the St. Paul Daily Reporter.)

The value of fertilizer in improving the crop is shown in a report which has been compiled by Swift & Co., who maintained an exhibit of a field of corn at the Minnesota State Fair grounds in September. The corn plot which contained 18-10 acres produced 83 bushels of corn per acre, and the corn was of excellent quality, large and uniform in size. The 1913 average yield of corn for Minnesota was only 40 bushels per acre.

Swift's "Grain Grower" fertilizer was applied on their demonstration plot—400 lbs. per acre at a cost of \$6.00. The seed corn used was furnished by Northrup, King & Co., Minneapolis, and is known as "Minnesota Ideal." The corn was planted May 17, a day following the application of the fertilizer which was sown broadcast. The field was harrowed thoroughly immediately after planting and cultivated four times during the growing season.

Mr. J. C. Simpson, secretary of the Minnesota State Fair board, writes as follows:

"Answering your letter of recent date, beg to advise that our scale book shows 10,700 lbs. taken from the ground, the plot being 70x1141 feet, containing, therefore, about 18-10 acres. The actual amount of corn husked was, therefore 149 bu., at 72 lbs. per bushel. This would be, a fraction less than 83 bu. per acre. We congratulate you upon the results obtained, also the quality of corn received."

Gold Medal Corn

An Extra Early Full Yellow Dent Corn.

A 14 to 18 rowed variety with ears averaging eight to nine inches long. The type is well fixed, the ears resembling almost every other ear, and on account of the high degree to which it is bred, it produces almost no nubbins or small ears. The history of this corn affords a striking example of what may be accomplished by intelligent and unremitting effort in a fixed direction. For twenty five years this corn has been grown in this county, (Hennepin Co., Minnesota). During the earlier years of its growth here the ears were small and without uniformity, but by careful breeding and selection it is improved until now we have one of the earliest and most productive yellow dent varieties, with ears of good size and the best quality. The kernels are not so deep as our Dakota Dent or Pride of the North, but are smoother and of more handsome appearance. On good soil and fair cultivation this variety has yielded about sixty bushels to the acre, sometimes more but seldom less. As it matures in about ninety days, it is ripe usually before frost and it has been our experience, not to have lost a single crop of this variety from this cause for more than fifteen years. The stalks grow about seven feet high on the average. When the grain ripens the foliage is still partly green, making excellent fodder. This corn will please you. Large pkt., 10c; lb., 20c, postpaid. By express or freight at purchaser's expense, $\frac{1}{4}$ bu., 80c; bu., \$2.50.

Northrup, King & Co.'s Minnesota King Corn

Our Own Minnesota Grown Seed. (Yellow Half Dent).

We regard this corn (introduced by us in 1889) in some respects, as one of the most valuable early varieties. There are varieties that under favorable circumstances will yield as much, but year in and year out, through fat years and lean years, there are, we believe, few that will do so well. It seems to possess a faculty of growing right along and making a crop during weather and under conditions that would ruin some varieties. We do not know of any good reason why this should be so, unless it be that it roots more deeply; but not only is this our own experience, but we have received like testimony from hundreds to whom we have sold it, the general expression being that for ability to endure extremes of heat and cold, flood and drought it is unexcelled. In appearance the Minnesota King is remarkably distinct, being a half yellow dent; the kernels are very broad and of an extremely rich, golden color. Average height of stalk, 7 feet; average distance base of ears from ground, 3 feet. The ear is of good size, eight rowed, cob small. Large pkt., 10c; lb., 20c; 3 lbs., 50c, postpaid. By express or freight, $\frac{1}{4}$ bu., 80c; bu., \$2.50. Bags free.

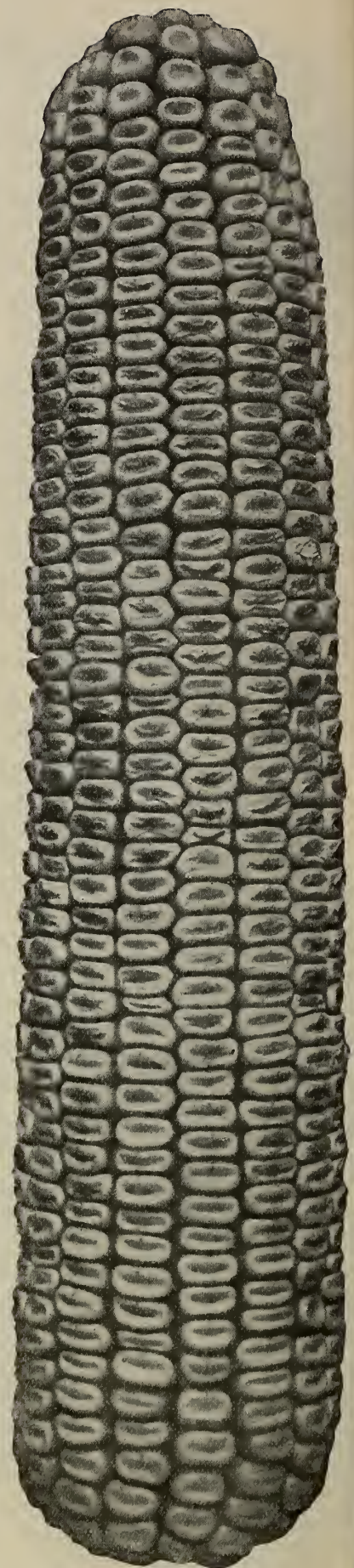


Minnesota Ideal Corn.

Reduced in Size.

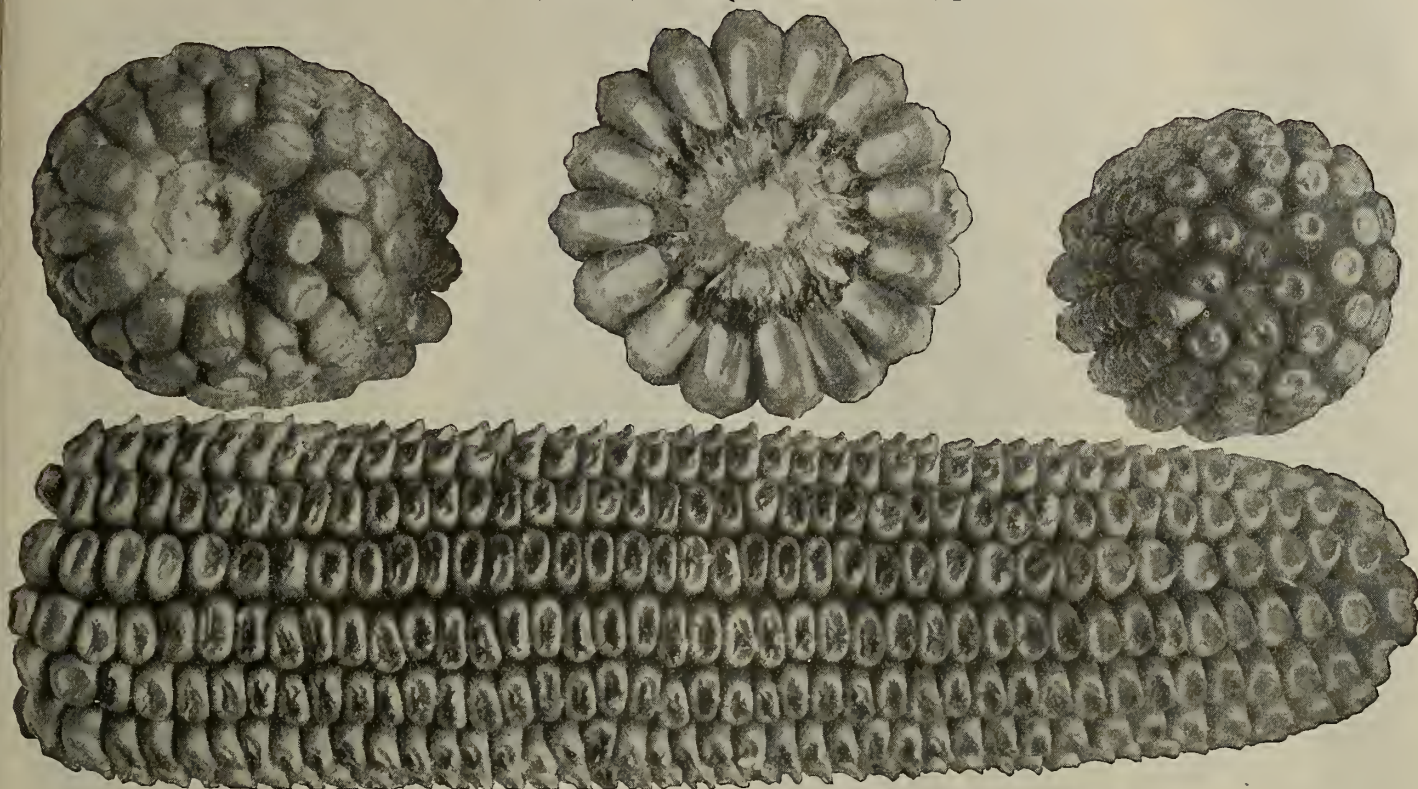
Write for special prices on
Seed Corn in large
quantities.

All prices on both field and fodder corn are those in effect when this catalogue was printed and are subject to change.



Northrup, King & Co.'s
Rustler White Dent Corn.

EXTRA EARLY YELLOW DENT SEED CORN FOR NORTHERN PLANTING.



Butt, Cross Section, Tip and Full Length View of an Ear of Northrup, King & Co.'s Dakota Dent Corn.



Northrup, King & Co.'s Dakota Dent. Earliest Full Yellow Dent. 16 to 20 rows; recommended for planting south of the 46th parallel of latitude. Thousands of bushels sold since introduced. It grows 7 to 8 feet in height; cob small, well filled out to the end with long, deep grains. It is a very heavy yielder. A fine sort for southern Minnesota, South Dakota and Wisconsin. Average height stalk, 8 ft. 1 in., average distance base of ear from ground, 3 ft. 2 in. Large pkt., 10c; lb., 20c, postpaid. $\frac{1}{4}$ bu., 75c; bu., \$2.25.

Minnesota Early Yellow Dent. A very early and hardy full dent corn. The kernel is not so deep and the cob is larger than our Dakota Yellow Dent or Pride of the North, but it can unquestionably be safely grown a little farther north than either of these varieties. This corn will stand more hard knocks than any other full yellow dent. Large pkt., 10c; lb., 20c, postpaid. $\frac{1}{4}$ bu., 65c; bu., \$2.00. Price subject to change.

Pride of the North.

A Dependable Early Yellow Dent Corn. In some sections of the Northwest it equals other varieties in yield and quality. The stalks are well proportioned, being short jointed and leafy. Two or more well developed ears are frequently found on a single stalk. The kernels are very deep and closely set on the ear. Pride of the North shells more corn in proportion to cob than any other variety grown in the West. It is specially valuable to stockmen, to feed in the bundle thus saving the expense of husking. Average height of stalk 8 feet, average distance base of ear from ground, 3 feet. Large pkt., 10c; lb., 20c, postpaid. $\frac{1}{4}$ bu., 75c; bu., \$2.25.

POP CORN

Big Money in Little Things.

Very often there is good money in "little things" which, because they are small, people are likely to overlook. Popcorn is one of these.

ITS PROFITABLE USES.

1st. It yields of shocked corn of the very best feeding value at the rate of 8 to 10 tons an acre.

2nd. The small ears which mature early, are very valuable for pigs, calves and young stock generally, especially during the fall and winter months.

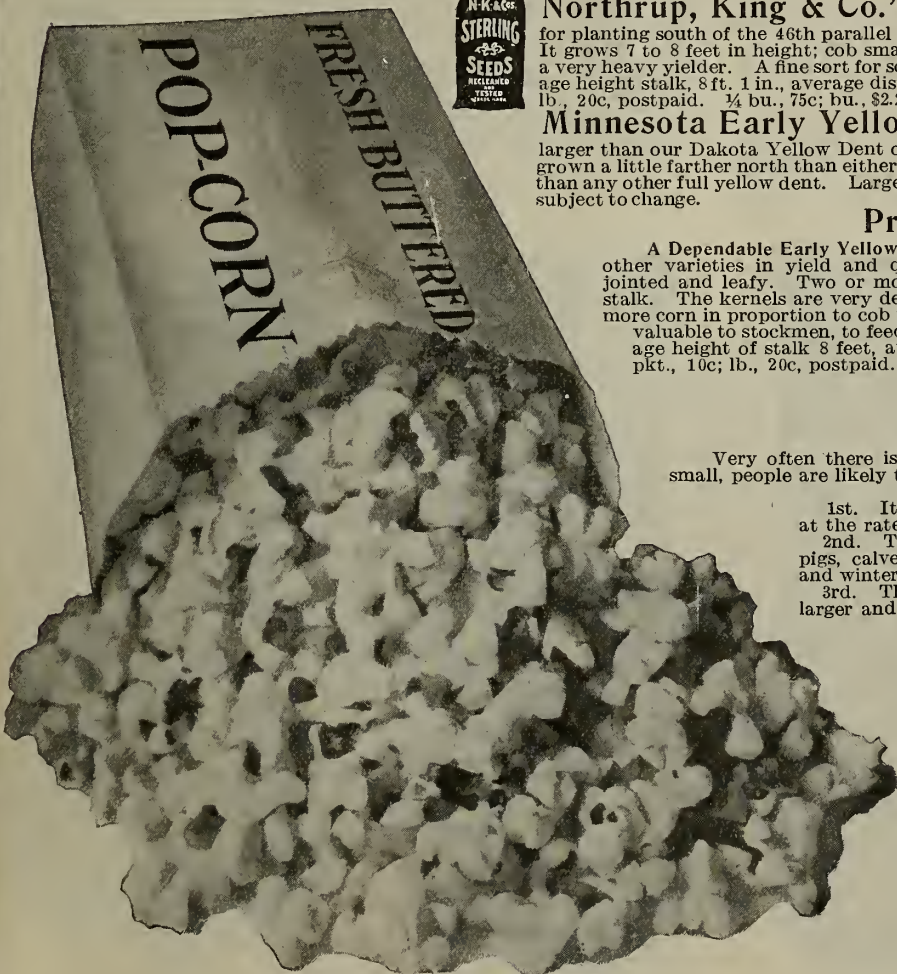
3rd. The yield of ear corn to the acre is quite equal to any of the larger and later varieties, as it can be planted much more closely than the larger varieties of corn.

4th. Thousands of carloads of popcorn are annually sold for popping purposes, the consumption having greatly increased since the advent of "Cracker-jack" and other like preparations.

5th. Popcorn brings a very much higher price either shelled or on the ear than any other corn and usually a ready market is easily found for any quantity, while in event of an inactive market, it can always be fed, and a farmer cannot raise better feed.

6th. Boys and girls can grow an acre or two of Popcorn and dispose of the product to their neighbors or to the merchant. There is usually a demand for this article and in this way considerable money can easily be earned. Why not plow up an acre or two and turn it over to the children. It will afford them pleasure and profit.

Plant at the rate of 6 to 8 quarts to the acre and closely. We have a very choice lot of this Popcorn carefully chosen and tested for seed purposes. Price, large pkt., 10c; lb., 25c, postpaid. By express or freight at purchaser's expense; lb., 15c; $\frac{1}{4}$ bu., \$1.00; bu. of 56 lbs., \$3.00. Bags free.



Relished Alike by Old and Young.

EXTRA EARLY FLINT SEED CORN

These are the earliest varieties grown and are especially adapted to Northern conditions. They make a rapid growth, mature quickly and under favorable conditions yield immensely. All are perfectly acclimated to our Northern conditions, which mean cool nights and short summers. The "Squaw" types of the flint corns are extremely early, but the ears grow so close to the ground that they cannot be harvested with a corn harvester, hence are most valuable to "hog off" by turning stock into the fields and thus allow them to harvest the crop. The Mercer, Triumph, Longfellow, King Philip, and Smut Nose are also much used for replants where the first plantings fail, also for late fodder on early summer fallows—native sod, and the new comer on the frontier can grow fodder from late plantings cheaper than he can make hay, thus providing a grain ration for the stock.

Hogging Down Corn. The practice of hogging down Corn is strongly recommended by the Iowa and several other state experiment stations. These four varieties of Flint corn listed below are especially suited for the purpose. At the North Dakota Station in the autumn of 1914, a poor crop of the Dent type, from $2\frac{1}{2}$ acres, was pastured by 16 pigs which made a gain of 818 pounds, or \$51.00 in value—after subtracting the cost of some additional concentrates which were fed.

This gives a value of \$20.40 an acre for this poor Corn without the expense of harvesting it.

Green pasture is also very desirable to use with the Corn for the best results. See page 132 regarding the use of Rape.

The advantages of hogging down corn are that it saves the labor of husking, cribbing, reloading and feeding; storage space is saved as no crib space is needed; the crop is harvested without waste; it gives the most pork for the least expense.

Seed of the Following Varieties is of Our Own Growing in the State of Minnesota.

Squaw. Extremely early and of very dwarf habit. We still grow this corn for those who want it, but we urge the planting of North Dakota White Flint, or North Dakota Yellow Flint, in its place, as both of these varieties are fully as early, more productive, and make a much more vigorous growth. Average length of ears $7\frac{1}{2}$ inches. Large pkt., 10c; lb., 20c, postpaid. $\frac{1}{4}$ bu., 80c; bu., \$2.50. Bags included.

Improved King Philip. (Extra Early Red Flint.) An old-time New England favorite perfected by us. Extremely hardy. One of the best and most reliable early sorts. Ears 10 in. long; very early. Large pkt., 10c; lb., 20c, postpaid. By express or freight, $\frac{1}{4}$ bu., 80c; bu., \$2.50.

More Than Pleased.

Your seeds were all satisfactory, but with the King Philip Corn we were more than pleased. Last year was a poor year, but it gave two ears to a stalk, and big long ears at that. We saved all that we raised for seed. In testing our seed corn we found that every kernel we planted grew. I tell you it was great.

EDWARD MORRIS, Bennington Co., Vt.

North Dakota White Flint. Resulting from a careful selection of Squaw corn for many years. Very much better than the Squaw. Average height stalk 5 ft., average distance base of ear from ground $1\frac{1}{2}$ ft. Average length of ear 8 inches. Large pkt., 10c; lb., 20c, postpaid. $\frac{1}{4}$ bu., 80c; bu., \$2.50. Bags free.

North Dakota Yellow Flint. (Gehu) Resembles White Flint in earliness, habit of growth, etc., but the grain is yellow. Under normal conditions this variety will mature in 70 to 75 days. In localities where seasons are short and nights are cool it may be depended upon to give a crop. The yield must, of course, vary with conditions of soil, cultivation and season, but it has been no uncommon occurrence to secure a yield up to 75 bushels per acre. Gives an abundance of fodder of splendid quality. Average height stalk 5 ft., average distance base of ear from ground, $1\frac{1}{2}$ ft. Average length of ear 8 inches. Large pkt., 10c; lb., 20c, postpaid. $\frac{1}{4}$ bu., 80c; bu., \$2.50.

Is All Right.

Your seeds have given me good satisfaction, and your North Dakota Yellow Flint Corn is all right.

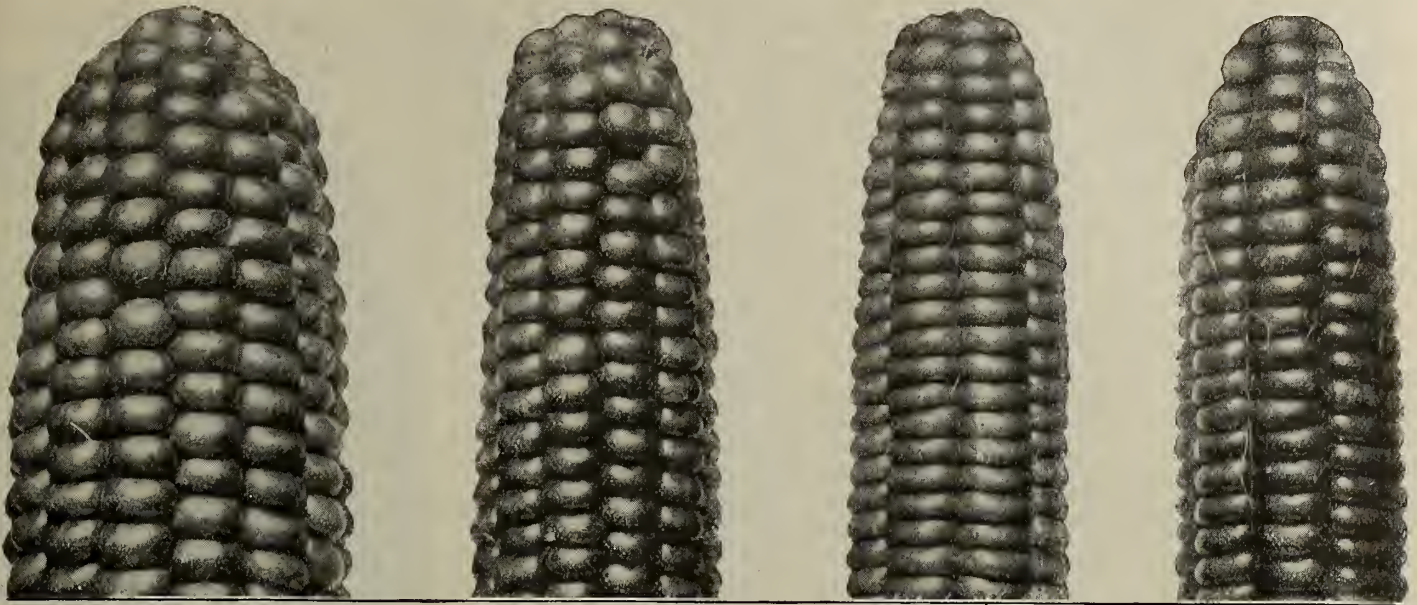
CARL G. CLEMENTS, Chippewa Co., Wis.

King Philip Flint Corn.

North Dakota Yellow Flint.

North Dakota White Flint.

Squaw Flint Corn.



FIELD CORN, EXTRA EARLY FLINT VARIETIES

Northrup, King & Co.'s Triumph.

Extra Early Yellow Flint.



In the year 1899 we introduced this corn as the largest eared and most productive of all the early flint varieties. Our customers know that when we send out a new variety that it is just what we claim for it, and so our sales were very gratifying. From every side comes hearty praise of this magnificent variety, more than sustaining every claim made for it.

Our Triumph Corn is a very early flint variety, very bright yellow in color, maturing in from 90 to 100 days from day of planting, according to soil and season. Ears average about 11 inches in length (about 3 inches longer than the Mercer) and are 14 to 16 rowed. Occasionally a 12 rowed ear is found; sometimes one with 20 rows. The kernels are large and the stalks are of good height. The ears average two to a stalk, growing well up so as to readily admit being cut by the harvester. The stalks grow very tall and leafy and make superior fodder.

Directions for Planting—The habit of this corn allows close planting. The largest crops of both corn and fodder will be secured by planting in rows, dropping the kernels one at a time one foot apart. If it is desired to cultivate both ways, plant in hills about 3 feet 8 inches apart.

Prices—Large pkt., 10c; lb., 20c, postpaid. By express or freight, $\frac{1}{4}$ bu., 85c; bu., \$2.75. Bags free.

Drew Two Prizes.

I bought one-fourth bushel of your Triumph Flint Corn last year and drew two prizes at the fair.
E. F. KING, Meeker Co., Minn.

Had A Good Crop.

Your seeds have proved to be very satisfactory. The Early Triumph Flint Corn I bought last spring had a good crop with nice long ears.
GILES BRONSON, Kittson Co., Minn.

Northrup, King & Co.'s Mercer.

Extra Early Yellow Flint.



Early, prolific, good size ear and small cob. Has been grown in Northern Minnesota and North Dakota for fifteen years with great success and complete satisfaction. Average season of maturity 80 days. Very prolific, having yielded 164 bushels of good, sound ears to the acre; ears average 9 inches in length, 12 to 14 rowed, well filled out to the tips; a rich golden yellow color; has matured in 75 days from time of planting. Many stalks have two and sometimes three good ears. Stalks average about 5 feet in height and make excellent fodder. Very few suckers. Large

pkt., 10c; lb., 20c, postpaid. By express or freight, $\frac{1}{4}$ bu., 85c; bu., \$2.75. Bags free.

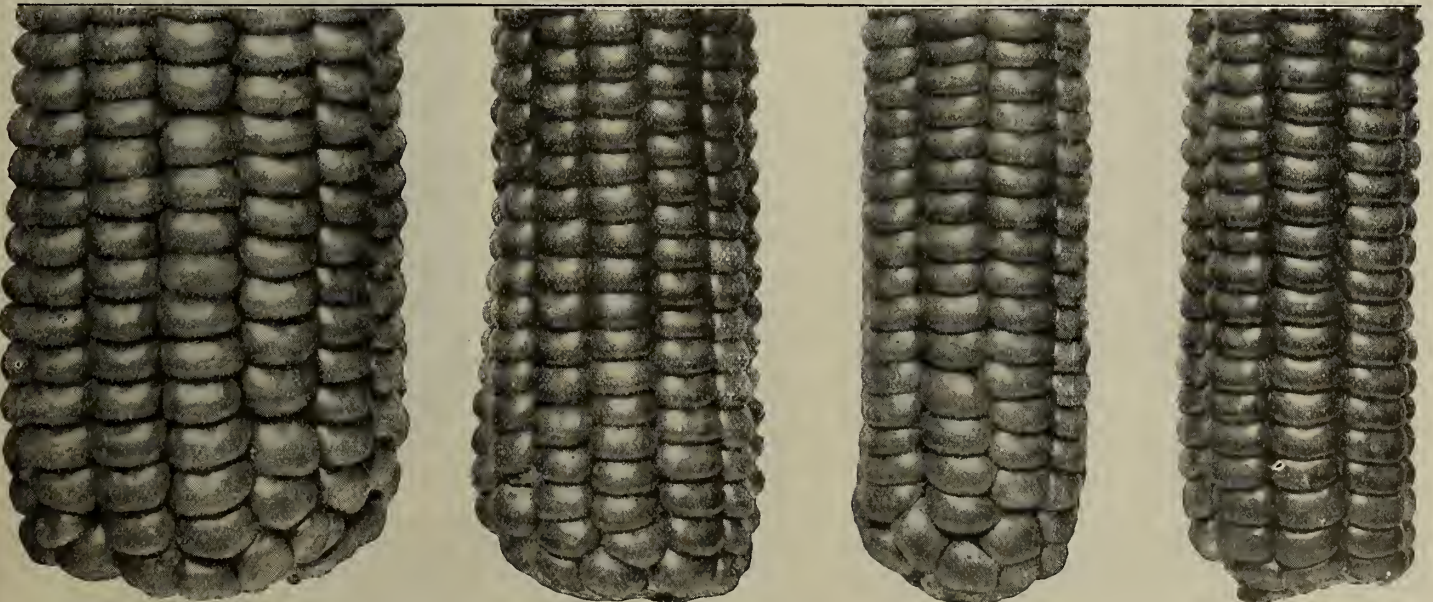
Longfellow. (8-row Yellow Flint.) A very early 8-rowed corn of the Canada type; ears cylindrical, about 11 in. long; color, rich glossy yellow. The weight of seed corn is fully 60 lbs. Average height of stalk 7 $\frac{1}{2}$ ft., average distance base of ear from ground, 3 ft. Large pkt., 10c; lb., 20c, postpaid. By express or freight, $\frac{1}{4}$ bu., 85c; bu., \$2.65. Bags free.

Smut Nose Flint. (8-rowed.) A yellow flint corn blazed with red at end of ear. Ears are large and round. This is a very early variety, and a great favorite in many localities. Our stock is very fine. Average length of ear 10 inches. Average height of stalk 7 ft. 6 in., average distance base of ear from ground, 2 ft. 11 in. Large pkt., 10c; lb., 20c, postpaid. By express or freight, $\frac{1}{4}$ bu., 85c; bu., \$2.75. Bags free.

Matures Quickly.

Your Triumph Flint Corn ought to be introduced extensively into the northern part of New England, as I believe it capable of outyielding the flints now in use. I shall use it for late planting as it matures so quickly and the rows can be planted close together.

HUBERT D. GOODALE, Fairfield Co., Conn.



Northrup, King & Co.'s Triumph Flint.

Northrup, King & Co.'s Mercer.

Longfellow Flint.

Smut Nose Flint.

FOUR LARGE-EARED STANDARD VARIETIES

Not Recommended for Planting North of Parallel 43°, or the Southern Boundary of Minnesota.

Reid's Yellow Dent Corn. This is a splendid yellow dent variety with eighteen to twenty-four rows of kernels on an ear. The cob is small and grains are very close together so that there is scarcely any room between the rows. We do not recommend this corn for growing north of the forty-third parallel, but for Iowa, Nebraska, Kansas, Missouri, Illinois and other states in the same latitude, this is the corn to grow. Reid's Yellow Dent has been awarded more prizes at Corn Shows than any other variety.

The ears average from eight to eleven inches in length. The stalk is very heavy, and is not easily blown down. This corn will mature under favorable conditions in about 115 days.

Our stock was grown for us by one of the largest and most reliable growers in Nebraska. It must be remembered that we do not recommend this corn for Northern planting except to be used for fodder or silage purposes. This is also true of the other varieties listed on this page.

Price of Reid's Yellow Dent Corn; lb., postpaid, 20c; by express or freight $\frac{1}{4}$ bu., 65c; bu., \$2.00.

Iowa Silver Mine Corn. The Great \$1,000 Corn. The introducer of this variety of corn says: "The most marvelous variety of corn ever offered, and which will surprise everyone who plants it. If the farmers take hold of this as they should it will revolutionize the corn growing of the country. Stalk grows to a height of about seven or eight feet and sets the ears about three and one-half to four feet from the ground. Just the right height for easy picking. It is early, matured last year in less than ninety-five days. The cob dries out rapidly, so that it is ready for the market very early."

This variety is more generally grown throughout the corn belt and is more widely and favorably known than any other white corn. It is a sure cropper; very early, deep grain, pure white, and a good corn in every way. It seems to have the faculty of producing a better crop on old, thin land than any other corn, as it seems to adapt itself to unfavorable conditions. This seems to be a characteristic of most white corns.

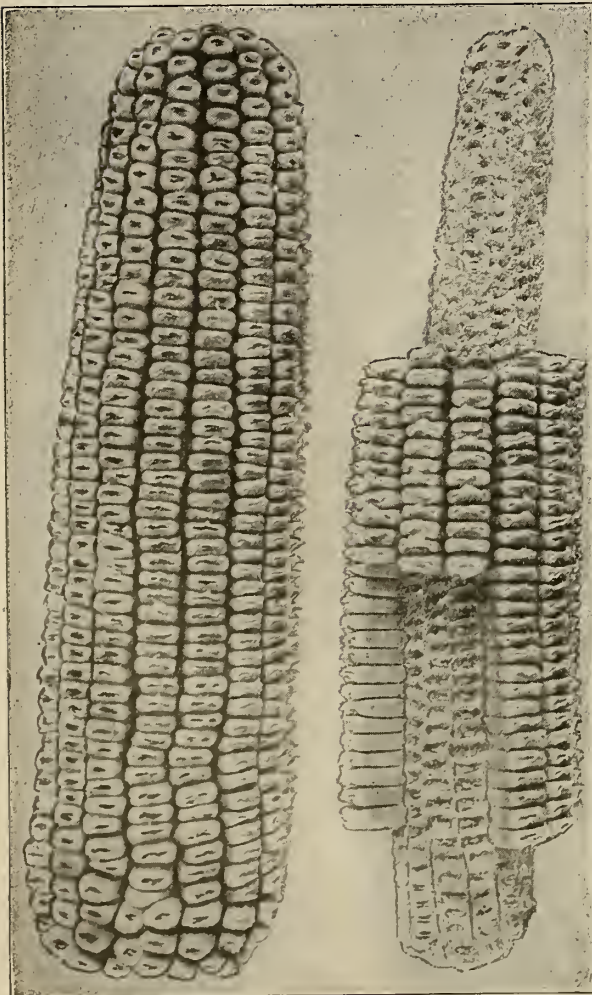
Silver Mine, is not, of course, adapted for Northern conditions, and we do not recommend it for planting except south of the northern tier of counties in Iowa. In favorable seasons it will produce a crop in southern Wisconsin, and southern South Dakota, but in all seasons is the corn to grow in southern Iowa, in Kansas, Nebraska, Illinois, Indiana and Missouri. The ears bear sixteen rows, very straight and close together. For the locations mentioned, we believe this corn will give better results than any other white variety.

Price, postpaid or by express prepaid, large pkt., 10c; lb., 20c; 3 lbs., 50c. By freight or express at purchaser's expense, $\frac{1}{4}$ bu., 65c; bu., \$2.00.

Iowa Gold Mine Corn. A Splendid Yellow Dent Variety. This corn is identical in appearance and habit of growth, in size of ear and earliness and in productiveness with the Iowa Silver Mine, and every one who has tried it is enthusiastic in praise of this splendid variety. It is early, ripening but a few days later than the Pride of the North. Ears are not excessively large, but of good size and symmetrical. Color, a bright golden yellow, shining like a new coin direct from the mint. Grain is very deep, cob small, and therefore dries out nearly as soon as it ripens. 70 pounds of ear corn make 60 to 62 pounds of shelled corn, and in hauling it to the market it weighs out five bushels more to the wagon load than common varieties in the same size wagon. 70 pounds of corn on the ear have given 64 pounds of shelled corn and only 6 pounds of cobs. This is unparalleled and cannot be equaled by any other corn in the world.

The kernels are deep, wedge-shaped. Our corn has been carefully grown, selected, cleaned and tested. Price, large pkt., 10c; lb., 20c; 3 lbs., 50c; postpaid. By express or freight at purchaser's expense, $\frac{1}{4}$ bu., 65c; bu., \$2.00.

King of the Earlies. A large eared variety of yellow dent corn suitable for growing in Iowa, Nebraska, Kansas, Missouri, Illinois and other states in the corn growing belt. We do not recommend this corn for Minnesota or any of the northern states, to grow for corn. But for fodder it will be found very valuable, producing as it does, an immense amount of heavy foliage and the yield of forage an acre is very large. In an extra long and favorable season it may mature here. In the states named above this sort will give a large crop, and is very satisfactory to grow. The ears average ten to twelve inches in length and 14 to 20 rows. The kernels are deep, wedge-shaped and set very close on the cob. Stalks under ordinary conditions are 7 to 8½ feet high. Price, lb., 20c, postpaid. By freight or express at purchaser's expense, $\frac{1}{4}$ bu., 65c; bu., \$2.00.



Iowa Silver Mine. Note the Small Cob.

Early Murdock

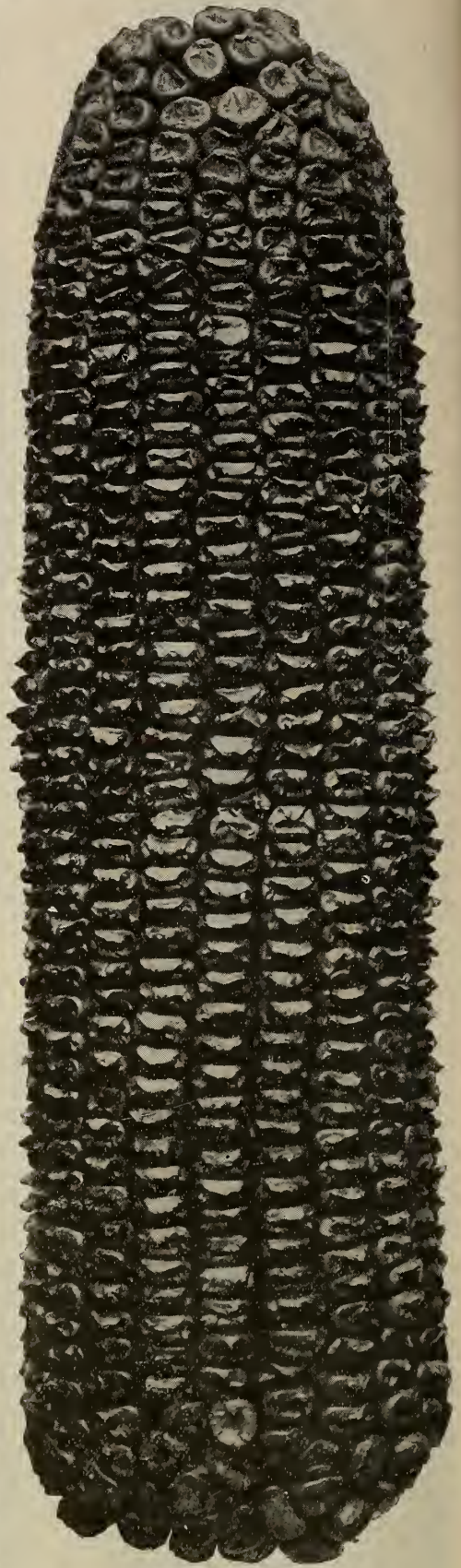
Suitable for Southern Wisconsin and Minnesota and South Dakota.

This is a standard and well known variety in Iowa and southern Minnesota. We have been working on this variety for several years to acclimate it to sections farther north. We have a carload of very fine seed which is safe for growing in the three southern tiers of counties of Minnesota and corresponding territory east and west, in South Dakota and Wisconsin. It may be also grown anywhere south of the locality mentioned and in favorable seasons, would do well even a little north of Minneapolis.

It is considered one of the most productive and as early as any of the deep-kerneled varieties. It is well established in type and is growing in favor with those who know it. It is one of the most dependable of the later varieties. It has a stout, stiff stalk which stands well in storms, growing 6 to 8 ft. high. The ears are borne well up on the stalk. It almost invariably yields well and with good care and favorable conditions, will give very large crops. Price, lb., 20c, postpaid. By express or freight, $\frac{1}{4}$ bu., 85c; bu., \$2.75. Bags free.

We Like Them of Course.

We have been using your seeds for nearly ten years. We like them of course or we would not keep on sending for them. We never had a package of seeds in all that time that failed to grow. (Miss) ENA NETTLETON, Montello, Wis.



Early Murdock Corn.

Northrup, King & Co.'s Sterling Silo Corn.



The building of silos throughout the Northwest, and more especially in Minnesota, Wisconsin and the Dakotas, has increased to a remarkable degree. More silos have been built in this part of the United States within the last year than for the previous ten years.

This has resulted in a demand for silage best adapted to feeding cattle, sheep, hogs and other live stock on the farm.

Corn is one of the most largely used of the various crops useful for silage, but it is not so thoroughly understood as it should be that its value depends—

First, upon the condition in which it is put into the silo, and

Second, the purpose for which it is to be fed.

Large quantities of Southern corn are used for silage in sections where ears will not form. Where a large bulk of green feed is desired, as in the case of young stock or milch cows, this corn may be profitably used, but the feeding value is not nearly so great, ton for ton, as in the more nearly ripened corn. In other words, except (possibly) in such cases, all sections should use for general silage those varieties of corn that will, in an average season, form well developed, if not perfectly matured ears.

Following this principle, we have selected for the various latitudes hereafter mentioned, leafy sorts, as tall growing as the section permits, which may be relied upon, in ordinary seasons, to form full sized ears, and, in long seasons, to mature the corn itself if so desired. We therefore recommend to our customers varieties which should be planted for silage as follows:

Northrup, King & Co.'s Sterling Silo Corn No. 1, ripens north of parallel of latitude 47°, viz: Northern Minnesota and Northern North Dakota.

Northrup, King & Co.'s Sterling Silo Corn No. 2, between parallel 45° and 47°, viz: Central Minnesota, Northern Wisconsin, Southern North Dakota and Northern South Dakota.

Northrup, King & Co.'s Sterling Silo Corn No. 3, between parallels 43° and 45°, viz: Southern Minnesota, Southern Wisconsin, Southern South Dakota and Northern Iowa.

Northrup, King & Co.'s Sterling Silo Corn No. 4, south of the 43rd° parallel, viz: Southern Iowa, Nebraska, Kansas, Missouri, Illinois, Indiana, etc.

By the use of these fodder corns, being careful to order the number recommended for the latitudes mentioned, the grower secures the important advantage of being able to put corn into his silo, in the precise condition he may deem best for his uses.

Book on Soiling Crops and the Silo. By Prof. Thomas Shaw. Covers fully the growing and feeding of all kinds of soiling crops, conditions to which they are adapted, plan of rotation, etc. Price, \$1.50, postpaid.

PLANTING AND HARVESTING.

Planting. Generally speaking, the seed should be sown in drills 3 ft. 6 inches apart, using $\frac{1}{4}$ to $\frac{1}{2}$ bushel of seed per acre, depending not only on the soil, but also the purpose for which the silage is to be used. Whenever less grain and more bulk is desired more seed may be planted to the acre, giving a greater amount of leaf and stalk but less ear corn. For fattening beef cattle the opposite is true; the more ears produced the greater the fattening properties and for that reason less seed should be sown per acre, giving it a better opportunity to mature. In either case the tonnage per acre will be about the same. In the one case there will be more leaf and stalk and less ears and in the other instance the opposite, less stalk and leaf but more grain.

Also by the use of these varieties, if the grower wishes, it may be cut at an early stage of its growth and used as fodder. Later it may be put in the silo in any desired stage and if the season promises to be long enough, it may be allowed to ripen for grain if this be decided upon.

Harvesting. Corn intended for the silo should be harvested with a binder and the bundles allowed to remain in the field for a day or two, where they will lose a portion of the moisture. If the leaves become dry, water may be applied from a hose as the corn passes through the silage cutter. Corn that has been frosted and become partially dry in the field may also be treated in this manner, with water, and will make excellent silage.

The Value of Proper Seed Stock. The best seed obtainable costs more than crib corn, but it is worth many times the difference to the grower. Our experience, of more than a quarter of a century, in growing seed corn places us in a position to determine which are the best varieties for grain as well as for silage. We offer the above varieties with entire confidence, believing the yields will not disappoint those of our customers who want seed corn for special purposes.

Our sales of seed corn are increasing many thousands of bushels each year, which is conclusive evidence that the results obtained from the use of our highly selected and high bred stocks by planters in the Northwest, are very satisfactory.

Special Notice: While we specialize in seeds especially adapted for Northern use, our trade in fodder, silage and seed corn all over the country is growing to such an extent that we are always in a position to furnish corn for any purpose or section, and we shall appreciate being given an opportunity to supply seed to our customers for special uses. Write and tell us for what particular purpose the seed is wanted and we will be glad to make recommendations.

Prices.

Owing to the necessity of printing this catalogue in the fall of the year, the edition being so large, all prices are subject to change in value. We enclose in this catalogue at the time of mailing a Red Figure Price List naming values at that time and will continue to issue same during the season, as prices change. Copy mailed to any address on request.

Northrup, King & Co.'s Sterling Silo Corn No. 1. Per bu., \$1.90.

Northrup, King & Co.'s Sterling Silo Corn No. 2. Per bu., \$1.65.

Northrup, King & Co.'s Sterling Silo Corn No. 3. Per bu., \$1.55.

Northrup, King & Co.'s Sterling Silo Corn No. 4. Per bu., \$1.45.

Write for prices on Silo Corn in large quantities.



Cutting Silo Corn on the Minnesota Experiment Station Farm.

HOW TO FILL THE SILO.

Cutting the Corn. The proper time to cut corn for silo filling is when the kernels are well dented and almost mature. The lower leaves are turning brown at this time but the stalks are still green and contain a large amount of succulence.

If cut while the corn is still immature and green, the silage will be sour and too laxative in effect, neither does it then have the feeding value that silage made from more matured corn has.

Caution. The blow pipe must be as nearly perpendicular as possible, so that the air will sift the material. If the pipe has much slant, the material will settle on the lower side and clog, the pipe passing over it instead of pushing it up.

Adding Water. If corn for any reason becomes over ripe and dry, excellent silage can still be made from it by adding water while it is being cut into the silo, a half a barrel to each load of corn.

Good silage can be made from frosted corn in the same way. In order to get a perfect distribution of water in the silage, it should be run through the blower with the silage. This can be done by running a steady stream into the blower by means of a small hose.

Packing the Silage. Thoroughly packing by tramping improves the quality of the silage. This should be done thoroughly, close to the wall. The center will take care of itself.

The surface of the silage while the silo is being filled should be kept concave, that is, lower in the center than at the walls. This will prevent an air space occurring between the wall and the silage from settling later.

Danger. When the corn is cut into the silo it soon begins to heat, which causes large quantities of carbonic acid gas to be given off. The gas being heavier than air collects in the silo and must be given a chance to flow out before any one is sent into the silo when work commences in the morning.

This may be done by opening a door at the surface of the silage. Running in fresh material will soon mix up the gas with fresh air and make it safe.

Capacity of Silos.

Silage for 200 Days.

Height	Diameter	Tons Capacity	No. of Animals to be fed	Lbs. fed per head per day	Tons silage required
24 feet	12 feet	54	15	25	32.5
28 feet	12 feet	64	15	30	45.0
28 feet	14 feet	86	15	35	67.5
30 feet	14 feet	92	20	30	60.0
32 feet	16 feet	120	20	35	70.0
34 feet	16 feet	128	20	40	80.0
32 feet	18 feet	162	25	35	87.5
34 feet	18 feet	172	25	40	100.0
36 feet	18 feet	182	30	35	105.0

Booklet on Silage and Silos. A treatise on growing, handling and feeding silage and instructions on how to build a silo. It will be sent free with orders if requested or will be mailed upon receipt of 5c in stamps.

Book on Weeds and How to Eradicate Them. By Prof. Thomas Shaw. This book contains a complete list of weeds prevalent in the United States and Canada and contains formulas and methods of destroying them. Price, cloth cover, 50c; paper cover, 25c, postpaid.

FODDER CORN

FOR many years we have been preaching Fodder Corn to the farmers of the Northwest, but the dry seasons of the last decade aroused them fully to its great value, especially was this true the last few years. When other crops had failed, and the farmers were wondering what they would do for feed, many planted Fodder Corn, because it was too late to put in anything else. Now every one of them puts a liberal acreage into Fodder Corn, because they have found it one of the most profitable crops to grow; not a makeshift, but a necessity. The increase in our sales of corn for fodder purposes in the past few years is almost incredible. We make a speciality of Fodder Corn, and our customers will find it to be of the highest quality.



A Field of Northrup, King & Co.'s Giant Fodder Corn. Note its leafy habit. This photograph was taken 60 days after planting.

New Uses for Fodder Corn.

This excellent forage crop has been grown largely in the corn growing sections because it produces more tons of feed an acre than any other grain or grass—25 tons an acre of green feed are often reported and occasionally 35 to 40 tons are produced on a single acre where conditions are most favorable for its development. Fodder Corn is now sowed broadcast at the rate of two or three bushels an acre for supplemental pasture to be used when grass is short and often dry during the autumn months.

To Kill Quack Grass.

Quack grass is taking possession of many of the best farms in the country. In such cases Fodder Corn is one of the best cover crops to smother this pest by shading it from the sun. Plow the quack grass sod late in the fall, which, with the freezing of the roots will greatly injure the plant. Cultivate with a spring tooth harrow every week during April and May. Plant Giant or Elephant Fodder Corn in drills, using one bushel of seed an acre and thus smother the quack grass and other weed pests.

LARGE SOUTHERN VARIETIES.

Prices Subject to Market Changes. See Red Figure Price List issued frequently during the season.

Northrup, King & Co.'s Giant Fodder Corn.

Reg. U. S. Pat. Off.



We believe that in most cases farmers can better afford to pay the price we ask for our Giant Fodder Corn than to plant other Southern varieties as a gift.

First, because in proportion to the quantity of leaf, this variety has a smaller stalk than any other variety. Second, while several other well known varieties of Fodder Corn often grow just as tall and even at times throw out leaves that are as large, the extraordinary productiveness of the Giant Fodder Corn arises from the closeness of the joints, and as leaves are thrown out from each joint, the result is an increased yield of fodder over any other variety. An extra pair of leaves on every stalk will more than pay the entire cost of seed on every acre of ground.

There are many reasons for considering Giant Fodder Corn the best and most economical, certainly it is by far the best of all the large growing varieties. The only objection that has ever been raised to the Giant, is that it grows very large, and is therefore harder to handle than the smaller sorts. We measured one stalk brought in by one of our customers, which was 14 feet in height; at the butt the stalk was two inches in diameter; half way up the stalk, 1½ inches in diameter. It bore 29 pairs of long and very broad leaves. This would seem to afford ample proof of the enormous feeding value of this truly remarkable corn.

Drill 1 to 1½ bushels to the acre in rows about 3½ feet apart. Five or six kernels to each foot of row. The seed of this variety is very large and pure white. Price of Northrup, King & Co.'s Giant Fodder Corn, ¼ bu., 50c; bu., \$1.40; 2½ bu. (bag) @ \$1.35; 10 bu. @ \$1.30; bags free. Write for special prices on round lots.

Reg. U. S. Pat. Off.

The above means that the item to which it applies has been "Registered in the United States Patent Office." Giant as a trade mark to apply on Fodder Corn may be used by us exclusively. No other is genuine. When buying Giant Fodder Corn be sure the above label is printed on the outside of the bag.

Varieties of Fodder Corn.

Fodder Corn may be divided into five classes, viz: Large Southern Varieties, Medium Dent Varieties, Early Dent Varieties, Flint Varieties and Sweet Varieties. Each of these has its friends. All may be successfully grown for fodder in almost any latitude. The merits of each class are briefly stated under their respective headings. If further information is desired, we shall be glad to supply it as far as it lies within our power, and will be pleased to make recommendations when desired. There is one point we want to impress on stockmen, dairymen and others using Fodder Corn, and that is to place your orders early. By so doing you secure the benefit of the present low prices. You can test the seed and have corn on hand that you know will grow when you are ready to plant.

The question of which is the BEST Fodder Corn will probably never be fully settled, any more than will be the question of the best breed of horses or cattle, so we try to present briefly and fairly the leading points of superiority claimed for each variety.

Northrup, King & Co.'s Red Cob Fodder Corn.

A tall growing Southern variety which is very popular all over the country. In Canada it seems to have the preference over any other sort, perhaps because it has been very widely grown and will produce a large tonnage in a short space of time. It grows very tall and very leafy and is exceeded in this respect only by our Giant Fodder Corn. The seed is white and grows on red cobs, thus giving it the name. Drill 1½ bu. to the acre in rows 3½ feet apart. Price by express or freight, ¼ bu., 45c; bu., \$1.35; 2½ bu. (bag) @ \$1.30; 10 bu. @ \$1.25. Bags free.

Southern White Fodder Corn. This is a tall growing leafy variety possessing the general characteristics of our Giant, but is not so closely jointed and therefore bears a few less leaves, with a corresponding smaller tonnage per acre. ¼ bu., 45c; bu., \$1.25; 2½ bu. (bag) @ \$1.20; 10 bu. @ \$1.15. Bags free.

Booklet on Silage and Silos. A treatise on growing, handling and feeding silage and instructions on how to build a silo. Contains much information of value and is well worth having. It will be sent free with orders if requested or will be mailed upon receipt of 5c in stamps.

Book on Feeding and Management of Live Stock by Prof. Thos. Shaw. A series of lectures on the principles covering selection, breeding, management and marketing of cattle, sheep and swine. 100 pages. Price, cloth cover, \$1.00; stiff cover, 50c, postpaid.

Just the Thing.

Your Giant Fodder Corn is just the thing for this country. I always raised it when in South Dakota and was much pleased with it there. What I planted early grew eleven feet tall, and what I planted the 6th day of July grew to be seven or eight feet tall. The cattle eat every bit of it, so there is no waste, and I believe it will produce more feed to the acre than anything else one can raise. I planted five bushels of this corn and I consider it safe to recommend it to anyone.

T. V. NASH, Douglas Co., Minn.

FODDER CORN



Northrup, King & Co.'s Elephant Fodder Corn.

MEDIUM DENT FODDER CORN.

There are many who prefer for fodder smaller growing corn than the large and later varieties, claiming for it the following advantages: 1st, that it is more readily handled by the corn harvester, or even the grain binder; 2nd, that it matures earlier, and gives well formed and often partially or fully ripened ears; 3rd, that it is more easily cured; 4th, that the smaller stalks make finer and richer fodder; 5th, that the fodder is more easily handled in putting through the silage or fodder cutter, or if fed long, is more easily handled in the manger.



Northrup, King & Co.'s Elephant Fodder Corn.

Reg. U. S. Pat. Off.

We believe this variety will best please the advocates of the type of corn above referred to. It is tall growing, averaging 7 to 8 ft. It is very leafy. It has a small stalk. It will form, even in Northern Minnesota and in North Dakota, good sized ears, thus adding to its feeding value. It is low in price. Drill in rows about 3½ feet apart, and 60 lbs. per acre.

Elephant Fodder Corn has been registered in the United States Patent Office by us, as we have used this brand in connection with fodder corn for a great many years, in fact were the first to use it in this connection. Please note that it is contrary to law for any one to use the brand "Elephant" on fodder corn without our permission. Every bag will be marked, "Reg. U. S. Pat. Off." Price, ¼ bu., 50c; bu., \$1.40; 2½ bu. (bag) @ \$1.35; 10 bu. @ \$1.30. Write for special price on large lots.

EARLY DENT FODDER CORN.

Many stock raisers are growing early dent corn as it gives a large proportion of fairly well matured ears, producing a feed which is rich in protein and very nutritious.

Early Yellow Dent Fodder Corn. When sown thickly in drills, at the rate of from one to one and a half bushels to the acre, this seed will give a surprising amount of rich feed, relished by all stock. It can be cut and run through an ensilage cutter for the silo just before maturity or it may be fed in the rack. Price, ¼ bu., 50c; bu., \$1.50; 2½ bu. (bag) @ \$1.45; 10 bu. @ \$1.40. All prices subject to change. Our Red Figure List gives latest values.

Early White Dent Fodder Corn. May be planted the same as the Yellow Dent Fodder Corn and matures at about the same time. While the Early Dent Fodder Corn does not yield so heavy a tonnage an acre, the resulting crop in most cases is of greater feeding value. ¼ bu., 50c; bu., \$1.50; 2½ bu. (bag) @ \$1.45; 10 bu. @ \$1.40.

FLINT VARIETIES FOR FODDER.

The farmers of Maine, Vermont, New Hampshire and Massachusetts use for Fodder Corn, Early White Flint varieties almost exclusively. There is absolutely no waste to this class of corn, as the stalk is eaten as greedily as the leaves, and the feeding value is superior to everything but the Sweet Fodder or Early Dent varieties.



Northrup, King & Co.'s White Flint Fodder Corn "State of Maine."

Our "State of Maine"

Fodder is the tallest growing and best of the white flint sorts. We have great faith that it is to become a most popular variety in the Northwest, and we would like to have our customers give it a trial. Even the staunch friends of "Giant" and "Elephant" will find in the "State of Maine" something for them to "think about." Drill 1 bu. to the acre. ¼ bu., 60c; bu., \$1.75; 2½ bu. (bag) @ \$1.65; 10 bu. @ \$1.60.

Early Yellow Flint Fodder Corn. We are getting to sell a good deal of Early Yellow Flint Corn for fodder. Stalk, leaf, ear and all make splendid fodder. ¼ bu., 60c; bu., \$1.75; 2½ bu. (bag) @ \$1.75; 10 bu. @ \$1.60.

All prices subject to market changes.

SWEET VARIETIES FOR FODDER

Early Sweet Fodder Corn. This makes capital fodder, and will mature ears in almost any part of the Northwest. The stalk is small, but sweet as honey and nothing can make better feed than this, fed ear and all. Drill 1½ to 2 bu. to the acre, in rows just far enough apart to admit cultivation. ¼ bu., 70c; bu., \$2.00; 2 bu. (bag) @ \$1.90; 10 bu. @ \$1.85. 48 lbs to the bushel.

Evergreen Sweet Fodder Corn. All varieties of sweet corn possess very much more "sugar" than any feed sort, and this being the most important constituent, it necessarily follows that the corn holding this in greatest quantity has the greatest net value. Evergreen Sweet Fodder grows much taller than the Early Sweet Fodder and makes well formed, but not matured ears in almost any part of the Northwest. Drill 1½ to 2 bu. to the acre. ¼ bu., 75c; bu., \$2.25; 2 bu. (bag) @ \$2.15; 10 bu. @ \$2.10. 48 lbs. to the bu.

Order early before prices advance or stocks become exhausted.



Early Dent Corn Growing for Fodder.

DWARF ESSEX RAPE



Showing the Wonderful Growth of Dwarf Essex Rape.

Dwarf Essex Rape.

Dwarf Essex Rape is one of the most valuable forage plants, its many uses being fully considered, that has ever been introduced in the United States, and we take pride in having been the first seed house to bring it prominently before the farmers of America.

Now that the sale of Rape Seed amounts to thousands of tons annually, it is interesting, by way of contrast, to look back to the year when we introduced it, and find that our sales for the season were less than 500 pounds.

Our customers can well understand that it gives us great pleasure to have lived to see our faith in Rape, for use in this country, amply justified by the outcome and that our effort to supply the very best quality of seed is recognized all over the United States.

There are several varieties of the Rape plant, but it will be found a loss of time and money to experiment with any other than the Dwarf Essex. Some houses offer it under other names but simply that, by praising it more, they may get a higher price for the seed. Any good Rape Seed is Dwarf Essex. Nothing more or less.

Dwarf Essex Rape has been usually grown, until recent years, to furnish pasture for sheep and lambs, but it is now being found equally good in providing pasture for all kinds of stock. It is splendid for dairy cows.

It is an annual, bearing a close resemblance in leaf and stalk to the Ruta Baga, but both leaves and stalks are more numerous in the Rape plant, and of a taller habit of growth. It is a pasture plant which may be eaten off by any kind of live stock, but it is pre-eminently fitted to furnish pasture for sheep, cattle and swine.

Rape is one of the most valuable pasture crops which can be grown. While it contains more water than some of the other plants, the dry matter of Rape is worth more as a feed, pound for pound, than that of Alfalfa, Clover or Vetches. This is because Rape is so very high in protein (the muscle, flesh and blood builder) and in ash (which makes the bone.) Thus when Rape is pastured by hogs, which are being fattened on corn, it balances the ration and little additional feed, such as skim milk, is required.

The Iowa Station recommends sowing 3 pounds of Rape seed per acre in the corn field at the last cultivation or before, allowing hogs to pasture the Corn and Rape together. They have proved this to be a very profitable practice and it is being carried on in all parts of Iowa and in many adjoining states. This makes the cost of growing the Rape about 40c per acre and nets splendid returns.

Culture. Rape is best adapted to moist, rich soil in which there is plenty of humus. Slough lands are especially good. It grows best in cool, moist weather and the time for sowing depends upon when the crop is to be used. When wanted for pasture, allow 8 to 10 weeks for it to attain maximum growth. Sow 1 to 2 pounds of seed per acre in drills and cultivate, for a weed-cleaning crop. For broad-casting, use 5 pounds per acre on rich, weed-free soil so that the Rape will not be choked by weeds.

For continued hog pasture, sow Rape early and at successive intervals. It may well follow any grain crop and is always splendid to plow under for green manure.



Hogs Pasturing on Dwarf Essex Rape. Do they like it?

About Quality and Price of Our Rape Seed.

Our Rape seed is of extra choice quality, selected stock. We pay a premium in order to get pure, clean, reliable seed and it has always given great satisfaction. A saving of a cent or two a pound means from three to ten cents an acre. We do not feel that for this difference between the price of known and unknown seed, seed that is proven good, and seed that may or may not be good, that we or our customers are justified in taking a risk.

Price, lb., 25c, postpaid. By express or freight, lb., 15c; 10 lbs. @ 12c; 25 lbs. @ 11½c; 50 lbs. @ 11c. Price subject to market changes. Write for special prices on large lots.

Booklet on Rape. How to sow, grow and use it. Written for us, by Prof. Thos. Shaw. To all who purchase Rape Seed we will send free upon request this pamphlet which brings the subject of Rape down to date. It contains many valuable suggestions.



Sheep Pasturing on Dwarf Essex Rape.

Northrup, King & Co.'s ANNUAL HOG PASTURE MIXTURE



Sold only in Sealed Bags.

We most earnestly urge upon farmers all over the United States the real importance to them of using this Annual Hog Pasture Mixture of ours. It is called Annual Hog Pasture Mixture because when we commenced selling it many years ago it was intended primarily to supply pasturage for swine. It has, however, proved of such great economic value, not only for swine but all other live stock, that its use is increasing at a rate that is truly amazing even to us who know how valuable a thing it is. It is made from 14 different grains and forage plants, many of which grow again as fast as fed down.

From every part of the country come to us letters telling the result of its use, and if we had room to print these letters, there is not one thoughtful farmer who reads this but would be so thoroughly impressed with the fact that he too should sow this mixture, that he would not fail to secure some of this seed.

No matter how much feed you have for your hogs, sheep and cows you can profitably grow our Annual Hog Pasture Mixture. The results will please you because this mixture furnishes the variety they need. Read Mr. John Piffner's letter on this point. With a large apple orchard into which to turn his hogs for the winter, with ample pasturage of Red Clover, Alfalfa, Timothy and Kentucky Blue Grass, he finds it very profitable to grow this mixture and he states the reasons. Another advantage in growing this mixture is that, sown in the spring, it comes in when other pasturage is apt to be at its worst, and continues green and bountiful all through the season until winter. This makes it valuable, too, as a catch crop, for it may be sown as late as the middle of August. We have customers who grow as much as 20 acres of this mixture, but its great general use is in small pastures or paddocks near the barns where the stock may be handily turned in at any time. Those desiring to raise an increased number of sheep and swine should note the fact that its use decreases the cost of fencing, as an acre yields four or five times as much as most pasturage. One more point, keep it fed down. It is best when young and tender and springs up again with amazing rapidity.

Now that grain is so high in price, it is essential that stock be given a nutritious feed in variety so as to cut down the expense of feeding. Northrup, King & Co.'s Annual Hog Pasture Mixture is just the thing for this purpose. We wish we could get every stock raiser to try at least an acre of our Annual Hog Pasture Mixture this coming season. Many of those who have used it in the past are now ordering it in lots of 1000 and 2000 pounds. They find they cannot get along without it.

The quantity of Annual Hog Pasture Mixture required varies according to conditions of soil and climate, but as a rule we recommend sowing 100 pounds to the acre. The ground should be thoroughly prepared as early in the spring as possible so as to give the mixture an early start. Price, \$4.00 a 100 lbs. In 500 lb. lots, \$3.75 a 100 lbs. Sacks free. (Five cents a lb. in less than 100 pound lots.)



A New "Point of View."

Mr. Hog: "Really, my dear, I think we shall have to raise our farmer's wages. He has shown most commendable foresight in providing us with this excellent pasture. In all my farming experience I have seen nothing like it."

WHAT USERS OF NORTHRUP, KING & CO.'S ANNUAL HOG PASTURE MIXTURE SAY ABOUT IT.

Mr. John Piffner's Letter.

The hogs, pigs and calves on my farm have the run of a large apple orchard which is seeded to a variety of grasses, including Clover, Alfalfa, Blue Grass, Timothy, etc. These supplemented with the windfalls from the fruit trees make a fine pasture. However, I believe that best results are obtained from the use of the largest possible variety of forage plants in the pasture. I sowed an acre to your Annual Hog Pasture Mixture. It made a wonderful growth and 25 tons of feed is understating the yield that acre gave me. I kept 50 pigs on it while they were weaned from their mothers. It grew faster than they could eat it. The cows were turned on the Hog Pasture Mixture after milking to keep it down. It makes a splendid all summer pasture for all kinds of live stock. JOHN PIFFNER, Dover, Minn.

Remarkable Results.

I bought some of your Annual Hog Pasture Mixture and it produced very remarkable results. C. F. UNDERHILL, Winnebago City, Minn.

It Did So Well.

Give me your prices on 2500 pounds of your Annual Hog Pasture Mixture. Yes, I want one ton. It did so well last year that I wish to double the dose. JOHN F. CLOSS, Dayton, O.

Consider it the Best Thing.

I wish to say that I have used your Annual Hog Pasture Mixture and consider it the best thing that ever came to the farmers of the Northwest. Hog raising has always been conducted on a small scale on most of our farms because, until this mixture of yours was introduced, nothing could be found in the form of an annual plant that would furnish good pasturage from spring until fall without becoming woody and tough, unless it was sown at intervals. Now I look for a large number of farmers to engage in the hog raising business and also for those who are already in it to increase their herds, for with such a

magnificent pasturage as your hog mixture supplies, the Northwest can raise and put upon the market a better class of pork at a lower cost of production than any other section of the United States.

Again, thanks to you and your Annual Hog Pasture Mixture for placing these favorable conditions within our reach, I am with kindest regards, yours truly,

O. R. ANEY.



It's the Greatest Money Saver.

I bought a lot of your Annual Hog Pasture seed in the spring. I hope your firm will carry it another year. It's the greatest money saver, in keeping hogs, we ever had on the place.

J. N. TITTEMORE, Maple Lodge Farm, Poy Sippi, Wis.

Hogs Could Not Keep it Down.

I sowed one acre to your Annual Hog Pasture Mixture and had thirty hogs running on it all season. They could not begin to keep it down and I was very much pleased with it, and can recommend it to anyone engaged in the hog raising business. PETER FRANDSON, Crystal Lake, Iowa.

It Saved Many a Dollar.

Your Annual Hog Pasture Mixture was a great success. It saved me many a dollar in buying feed last summer; it surprised my neighbors.

JOHN COLEMAN, Le Sueur, Minn.

Found them O. K.

I have sent to you for two years for my seeds and have found them O. K. in all respects. I have received no seeds that did not give good satisfaction in every particular. I am in the market for more for next spring.

R. A. WERNER, Gackle, N. D.

Very Good Results.

I have seeded Northrup, King & Co.'s Annual Hog Pasture Mixture for two successive years and have had very good results. Also your Elephant Fodder Corn is a bumper crop. It yielded 60 pounds to the rod in the row. The fact is I cannot get along without these two kinds, as I don't know of any other seeds that will give as much green feed as these do.

L. A. WEISETH, Colman, S. D.

Especially Satisfactory.

Your seeds for the past three years have always proved satisfactory especially your Annual Hog Pasture Mixture. JOHN DAHLBERG, Curtiss, Wis.

Used It Five Seasons.

The Annual Hog Pasture Mixture purchased from you has been so satisfactory I think you should know it. This is the fifth season I have sown it and consider it the best of anything I have seen. During the past five years I have purchased several hundred pounds of your Sterling Timothy, Medium Red and Alsike Clover and Alfalfa, and cannot speak too highly of the results. Our neighbors who have always believed in the average run of seed have pronounced it the finest they have ever seen and some have been using it on account of our good crops. I always take pains to speak a good word for your seeds as I think you are entitled to it, and many more should use them than are now doing. F. L. DAGGETT, St. Paul, Minn.

PERMANENT HOG PASTURE MIXTURE

So great has been the success of Northrup, King & Co.'s Annual Hog Pasture Mixture, that we now offer a permanent mixture which, once sown, will remain for years without re-seeding. This mixture is offered with the confidence that it will give stock raisers entire satisfaction. It has already been thoroughly tested and proved of great value for all kinds of stock. It contains five varieties of Clover, besides many other kinds of grasses. We do not recommend this to entirely displace our Annual Hog Pasture Mix-

ture, as it will not produce so much in bulk, nor make new growth so quickly after pasturing. It is, however, a substantial mixture which will prove a profitable investment to any farmer and, we are safe in saying, cannot be equaled anywhere. Not only is it suitable for hogs, but sheep, cows and horses relish this rich pasturage. You cannot afford to be without it. Order both kinds to keep your stock well supplied with abundant feed. Sow from 20 to 25 lbs. of seed an acre. Price, \$14.50 a 100 lbs. Sacks free. In less than 50 lb. lots, 16c a lb.

FORAGE AND SOILING CROPS.

SORGHUM OR SUGAR CANE.

Prices subject to market fluctuations.

Note the wide range of uses to which Sorghum may be put, and its great value in each case.

As a soiling crop, Sorghum will always prove of great value, since at least two crops can be obtained from one sowing. Milch cows are exceptionally fond of Sorghum. It is excellent for milk production and a given area furnishes a large quantity of succulent food.

As a pasture crop for cattle, sheep and swine it has no superior. When grazed down it will quickly spring up again, thus a large amount of pasture may be obtained at a season when forage is scarce.

As a fodder crop it furnishes an enormous amount of feed. Not infrequently Sorghum out yields Fodder Corn almost two to one, producing a richer and more nutritious feed of greater value. Thus it will be seen that utilized as a pasture, as a soiling and fodder crop, it may be made to furnish feed nearly the whole year round.

Sorghum can be profitably grown in all the tillable portions of the United States that will produce corn, and will withstand drought better than corn.

The quantity of seed to be sown to the acre depends on climatic conditions and upon the mode of planting. If sown broadcast, or with a grain drill, all tubes in use, 50 to 60 pounds of seed to the acre will usually suffice. Where the moisture is likely to prove inadequate to the growing crop, more satisfactory results will be obtained by reducing the quantity of seed. When grown in single rows with a space between them, a less quantity of seed than above stated will suffice, depending upon the distance between the rows.

Minnesota Sorghum. Early Amber Cane. This is the earliest, richest and altogether the best sort for Northern latitudes, and is the only variety which can be relied upon for sugar or syrup in Minnesota. It produces a rich, clear syrup for which Minnesota has become famous, the usual yield being from 150 to 250 gallons an acre. The yield of seed is also large, amounting to 20 to 25 bushels an acre. As a fodder plant we believe this excels the Southern Cane, as it is sweeter, contains more nutriment and is more relished by stock. From the illustration it will be seen how leafy and tall the Minnesota Sorghum grows. Lb., 20c, postpaid. By express or freight, lb., 10c; 10 lbs., 80c; 100 lbs., \$5.00. Bags free.

Southern Cane. This variety does not mature so early as the Minnesota Sorghum, but the yield is very much heavier. When Sorghum is grown for fodder only, the Southern Cane will give the greatest tonnage and is usually grown on that account by dairymen, to feed their milch cows. It is also desirable when grown as a pasture plant for sheep, hogs or cattle. All kinds of stock eat it readily. Southern Cane is not suitable for making syrup when grown in the North, but for feeding purposes is splendid. Write for special prices on large quantities. Lb., 20c, postpaid. By express or freight, lb., 10c; 10 lbs., 50c; 100 lbs., \$3.35. Bags free.

Soy or Soja Beans. Northern Grown. Valuable for ensilage or soiling food for cows. Like clover they are great soil enrichers, gathering in nitrogen from the air and storing it in the soil. They should be planted after corn in rows 2½ feet apart with 6 to 8 plants to the foot of row. Soja Beans may be grown for grain, soiling food, ensilage, pasture and green manuring. The yield is very heavy as some plants bear as many as 100 to 150 pods on each. The beans are the richest known vegetable substance. When ground and fed to milch cows they are splendid for keeping up the milk flow. Pkt., 5c; by express or freight, 10 lbs., 95c; 50 lbs., \$4.50; 100 lbs., \$8.50. Bags free.

Cow Peas. Northern Grown. Furnishes good pasture for cattle, sheep and swine, may be used for soiling or hay, but for the two purposes last named it is a little difficult to handle. It has great power to enrich the land by putting in it nitrogen drawn from the air, and since it may be grown as a catch crop, an immense future lies before it in enriching the soils. When pastured by cattle, the early pods should be well formed before turning in the stock. When pastured by swine, the crop should be allowed to get nearly ripe. When plowed under as a fertilizer, the plowing should be done when the plants are in full bloom. But even when pastured by cattle and some of the produce is rejected as food, the part thus rejected is very helpful to the soil. The growing of cow peas in the northern part of the United States is only just beginning. A great future lies before it. Price, pkt., 5c; by express or freight, 10 lbs., 95c; 100 lbs., \$8.50. Bags free.

Feterita. A wonderful new grain which has attracted considerable favorable attention in Kansas, Missouri and Oklahoma. It belongs to the Sorghum family. It was introduced from Africa by the United States Department of Agriculture. The advantages claimed for Feterita are its drought resisting qualities, its heavy yield, its earliness, its stooing propensities and its freedom from insect pests. Feterita successfully withstood dry weather in Kansas and nearby states during 1913 and yielded under these unfavorable conditions, 35 bushels per acre and more. Under proper conditions, it will yield 60 to 75 bushels to the acre. It branches very freely from the roots, making from three to eighteen heads from a single stool. It is from two to three weeks earlier than Kaffir Corn, and should successfully mature in the North. The chinch bugs will consume other crops, but seem to leave Feterita entirely alone.

Lb., 20c, postpaid. By express or freight lb., 10c; 10 lbs., 55c; 100 lbs., \$3.90. Bags free.

Thousand Headed Kale. This is a variety of cabbage. The plant attains a height of three to four feet. The stem is covered with leaves which form small heads. Animals, especially sheep, eat it greedily. It grows well on most any land and is hardy. The seeds may be either drilled or broadcasted, but we think drilling is better. If drilled, plant in rows 26 to 30 inches apart, so that plants may be thinned out so as to stand 16 to 18 inches apart in the rows. In drilling use ¾ to 1 pound of seed to the acre. In broadcasting 1½ pounds are required. Prices by mail, postpaid, large pkt., 5c; ¼ lb., 20c; lb., 55c. By express or freight, lb., 45c; 10 lbs., \$4.00.

Sunflower, Mammoth Russian. Only those who have tried it realize what an important crop the sunflower proves to the poultry and hog raiser. The poultry man well knows the egg producing properties of sunflower seed. It is also very fattening and contains a very high percentage of protein. Sow the seed in rows far enough apart to admit of cultivation. 2 to 3 pounds will plant an acre. The plants will grow from 6 to 10 feet high and will be literally covered with large heads well filled with seed. In feeding to both poultry and hogs, all that is necessary is to allow them to help themselves. Large pkt., 5c; ¼ lb., 10c; lb., 25c, postpaid. By express or freight, lb., 15c; 5 lbs., 60c; 10 lbs., \$1.00.

Elements of Agriculture. By J. H. Shepperd and J. C. McDowell. This book is very complete and discusses in plain language the various farm crops and how to handle them. Illustrated. Price, \$1.00, postpaid.

All prices on field and grass seeds are subject to market changes. Our Red Figure Price List with latest quotations will be mailed any time upon request.



Minnesota Sorghum. Note its Height and Leafy Habit.

Australian Salt Bush. Yields large crops of excellent fodder and silage. Our grower of seed writes as follows: "Salt Bush should not be planted on foul ground or where it cannot be given tillage to start it. After it is established, it is a strong grower and will thrive in poor soil, alkali, heat and drought to an astonishing degree, and will also appreciate good ground and yield accordingly. I have produced nearly forty tons per acre of green forage on good wheat ground. It pays to provide a good seed bed, then drill the seed in thinly, four feet apart, covering slightly and firming down. Keep the weeds out until it gets a start. For dairy pasture it cannot be excelled. In the North, Salt Bush is an annual; farther south, a perennial, but I find it easier to replant every year." Two pounds of seed will plant an acre. The value of Salt Bush has never been appreciated even where it has been most grown, and should be given more attention by farmers everywhere. Pkt., 10c; ¼ lb., 30c; lb., \$1.00, postpaid.

Kaffir Corn. Grows 4 to 5 feet high. The stem or stalk bears numerous wide leaves. The stalks are brittle and juicy, not hardening like other varieties of sorghum. It makes excellent fodder, either green or dry, which is highly relished by cattle and all kinds of stock. The seed crop is also heavy, sometimes 50 to 60 bushels to the acre. For grain, sow in rows 3 feet apart, 3 to 5 pounds of seed to the acre. For fodder, sow ¼ to 1 bushel either broadcast or in drills. Large pkt., 5c; lb., 20c; 3 lbs., 50c, postpaid. By express or freight, 10 lbs., 50c; 50 lbs., \$1.55; 100 lbs., \$2.80.

Peanuts, Iverson's Improved. This variety combines earliness, large size and prolificness, yielding fewer imperfect pods and less "pops" than any other sort. Peanuts can be successfully grown in almost any place where corn succeeds. Every part of the peanut is useful. The vines are a valuable feed for horses, cattle and sheep. An acre will produce from one to two tons of vines. The nuts are relished by nearly everyone and in the South are fed to the farm animals and poultry. The nuts contain a large per cent of rich nutriment. Peanuts do best on a light sandy soil, but any open soil will do. The ground should be plowed deeply and thoroughly harrowed. Careful tillage is important. All weeds and grass should be killed to give the plants all the food in the soil. Seed peanuts should be carefully hulled to prevent breaking the skin on the kernels. They should be planted in rows two and a half to three feet apart and ten to twelve inches apart in a row. Cover with about two inches of earth. When they are matured, pull them up and expose to the sun for a few days. The benefit to the land in growing Peanuts is nearly equal to growing Clover. Pkt., 10c; lb., 30c, postpaid. Write for special price in large quantities.

Peanuts, Small Early Spanish. This variety, although small, is best suited for growing in the north, being earlier than any other sort. It yields enormously, pods that are solid and unusually well filled. As a confection it is sweeter and more delicious than the larger varieties. In the south, it is grown extensively for forage, especially for fattening hogs and other live stock. The stalk and nuts fed together make a complete grain ration, but the stalks fed alone are also very valuable. Seeds should be planted in drills, 3 feet apart, 8 to 10 inches apart in the row. Plant is of upright, bushy growth, making cultivation easy.

Prices, pkt., 5c; lb., 30c, postpaid.

Forage Crops other than Grasses. By Prof. Shaw. \$1.00, (postpaid, \$1.10.)

"Nitragin" for inoculating Cow Peas, Beans, Alfalfa and Clover. Page 141.



A Field of Canada Field Peas. Four feet high at time of blossoming.

FIELD PEAS

PRICES. For prices on Field Peas see Our Red Figure Price List which is enclosed in this book. Prices on field and grass seeds subject to market changes. New price list sent anytime upon request.

"Peas could be made to bring more nitrogen to the soils of this country every year than is now purchased annually by the farmers at the cost of millions."—Year book of the U. S. Department of Agriculture.

The above statement, coming as it does from a reliable source, gives the progressive farmers of this great Northwest, something to think about. Grain has been grown year after year on many farms, sapping the life and fertility of the soil. Here is a crop which is not only profitable but will return to the land the much needed nitrogen. Peas are second only to Clover in their soil enriching properties and can be grown under almost any condition of soil or climate. There is always a ready market for peas, or they can be profitably ground and fed to stock. The vines make rich, nutritious hay. If fed to milch cows, when green they increase the flow of milk. Peas are a paying crop and can be profitably planted in many ways. First. When sown alone about three bushels are required to the acre. They can be matured and threshed when dry. The yield will vary from 30 to 60 bushels an acre.

Second. Peas and oats are frequently sown together, using $1\frac{1}{2}$ bushels of peas and 2 bushels of oats an acre. By so doing a double crop can be secured. They can be threshed at one time and readily separated in cleaning.

Third. They can be sown alone or with oats and fed green. It is surprising the amount of fodder which is produced in this way. If sown together, sow peas first and plow under four inches; then drill in the oats.

Fourth. For plowing under when peas and oats are sown together and each are "in milk," they are nearly equal in value to Clover, used in the same way, to enrich the soil.

Golden Vine Field Peas. Yellow. Height of vine, $3\frac{1}{2}$ to 4 ft. A fine, vigorous variety. This strain is especially desirable on account of the heavy yield. On good soil it gives a very heavy crop and yields fairly well on land so poor as to be otherwise non-productive.

Canada Field Peas, Yellow. Height of vine $3\frac{1}{2}$ to 4 ft. This is a standard variety of Field Peas and needs no special description. This variety is extensively grown in Canada, Wisconsin and other pea growing sections, and has a large sale, not only for agricultural purposes, but for use in soups.

Canada Field Peas, Green. Height of vine $3\frac{1}{2}$ to 4 ft. Of the same general character as Canada Yellow Field Peas. Used for the same purposes, but the seed is green in color instead of yellow.

Scotch Peas. Grown largely for early green forage. Foliage is more rank and abundant than Canada Peas. Sow one to one and a half bushels per acre with oats for support.

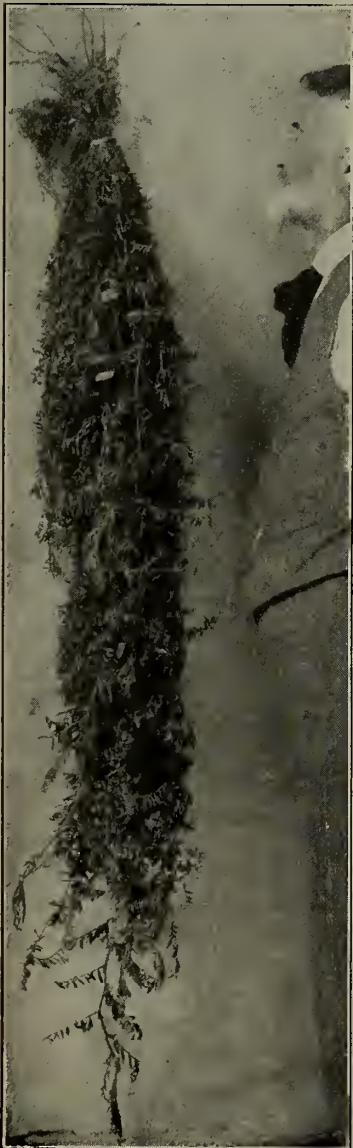
VETCH

Sand or Winter Vetch. (*Vicia Villosa*.) Sometimes called Hairy Vetch. This is a very valuable forage plant and is rapidly becoming more popular each year as the farmers of this country are learning more of its great value. It is very hardy, is valuable as a winter cover crop to prevent leaching, and for forage and fertilizing purposes. It is an annual, but re-sows itself and will come up year after year on the same ground. It succeeds well on nearly all soils and thrives surprisingly on poor, light land and will endure extremes of drought, heat and cold. It improves the soil, being a great nitrogen gatherer. The roots bear innumerable nodules or nitrogen-gathering bacteria. These take the nitrogen from the air and restore it to the soil where it is so much needed. It belongs to the pea family, but the vines are much longer and the foliage is more abundant. The vines in the illustration were from the second crop and measure five feet and seven inches in length. These plants were grown within a few miles of Minneapolis, on the farm of Mr. James J. Hill. It may be sown either in the spring or fall with about half a bushel of rye or oats for support. It grows rapidly and is particularly valuable in sections where Clover does not thrive. In the North it remains green all winter under the snow and it is invaluable for early pasturing or soiling. The Department of Agriculture estimates the value of an acre of this Vetch plowed under equal to commercial fertilizer at the rate of from \$16 to \$40 an acre. When sown in August or September it covers the ground before frost and prevents leaching of the soil during the winter and spring. When sown in April or May it can be cut in July, the second growth affording excellent pasture during the summer. The yield of green fodder is from twelve to twenty tons an acre. This may seem to be an exaggerated statement but when the amazing stooling propensities of this plant are taken into consideration the yield is readily accounted for. As many as twenty long vines spring from each root. When raised for hay it should be left standing until some seeds have become well formed. We especially urge farmers of the Northwest to try Sand or Winter Vetch. Not only does it produce an enormous amount of very valuable feed, but it at the same time restores to the soil a great amount of fertility which is so much needed. It will not disappoint. Plant at least an acre this season. 50 to 60 pounds of seed required to the acre. Large pkt., 5c. By express or freight, lb., 20c; 10 lbs. @ 15c per lb. 50 lbs., \$7.00; 100 lbs., \$13.00.

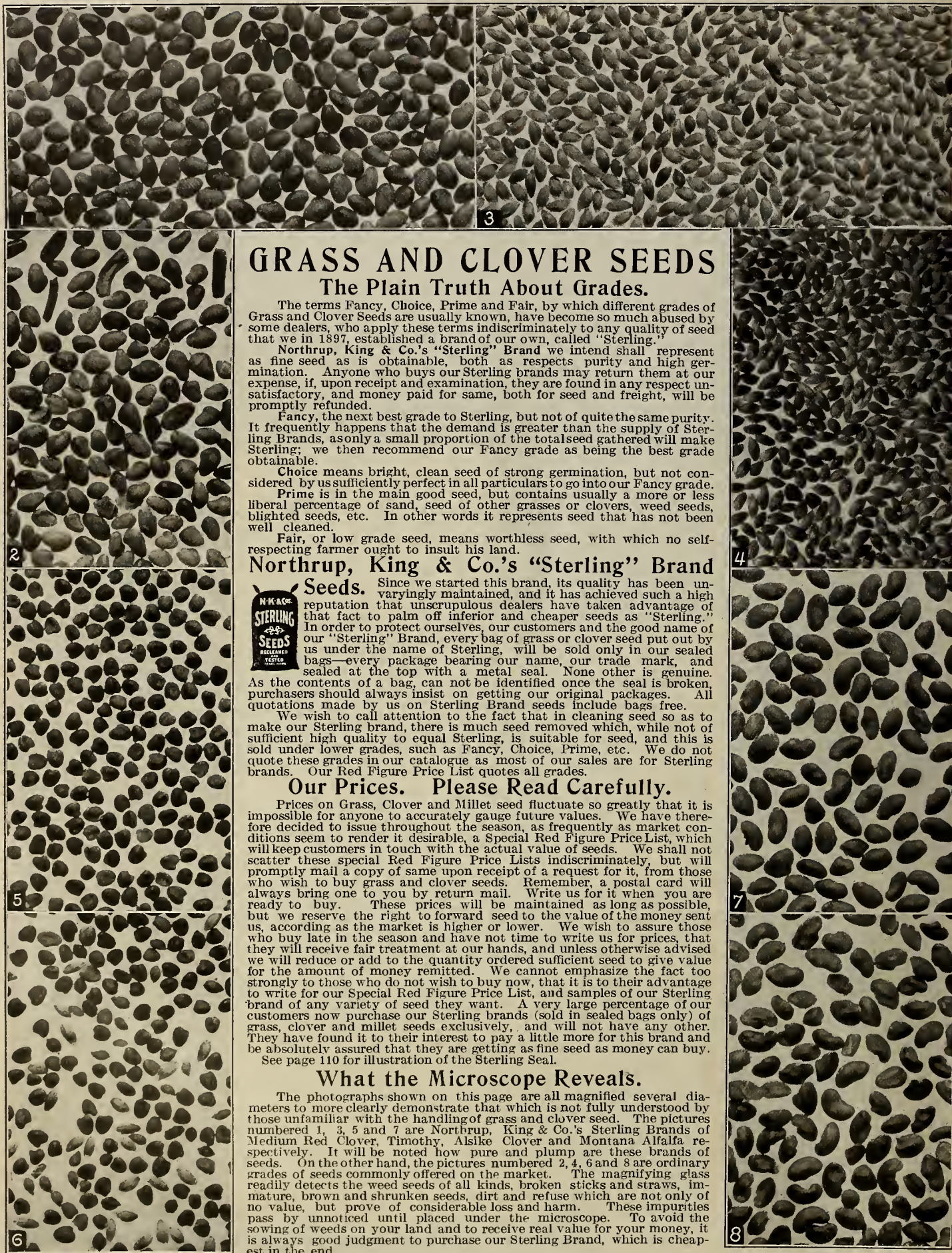
Spring Vetch. Known also as Tares, English Winter Vetch, Oregon Winter Vetch or Common Vetch. Used for the same purpose as the Sand Vetch but will not thrive on poor soil or withstand extremes of weather so successfully. Sow with oats, using a bushel of each an acre. Large pkt., 5c. By freight, lb., 15c; 10 lbs. @ 10c per lb. 50 lbs., \$4.50; 100 lbs., \$8.00.

Lupins. This is a very valuable forage crop, not only because of its feeding value, but it may be plowed under as a green fertilizer. Lupins will do well on poor land, being especially adapted to old, worn out and sandy soils. In Germany they have gained the name of Desert Reclaimer on this account. They make excellent forage, either green or cut for hay, the seeds being very nutritious. Sow broadcast 90 lbs. to the acre, as soon as frost is out of the ground. Lb., 15c, add for postage at rates on page 1.

Prices on field seeds subject to market changes. See page 141 for "Nitragin."



Winter Vetch, Second growth. 5 ft., 7 in. long.



GRASS AND CLOVER SEEDS
The Plain Truth About Grades.

The terms Fancy, Choice, Prime and Fair, by which different grades of Grass and Clover Seeds are usually known, have become so much abused by some dealers, who apply these terms indiscriminately to any quality of seed that we in 1897, established a brand of our own, called "Sterling."

Northrup, King & Co.'s "Sterling" Brand we intend shall represent as fine seed as is obtainable, both as respects purity and high germination. Anyone who buys our Sterling brands may return them at our expense, if, upon receipt and examination, they are found in any respect unsatisfactory, and money paid for same, both for seed and freight, will be promptly refunded.

Fancy, the next best grade to Sterling, but not of quite the same purity. It frequently happens that the demand is greater than the supply of Sterling Brands, as only a small proportion of the total seed gathered will make Sterling; we then recommend our Fancy grade as being the best grade obtainable.

Choice means bright, clean seed of strong germination, but not considered by us sufficiently perfect in all particulars to go into our Fancy grade.

Prime is in the main good seed, but contains usually a more or less liberal percentage of sand, seed of other grasses or clovers, weed seeds, blighted seeds, etc. In other words it represents seed that has not been well cleaned.

Fair, or low grade seed, means worthless seed, with which no self-respecting farmer ought to insult his land.

Northrup, King & Co.'s "Sterling" Brand Seeds. Since we started this brand, its quality has been unvaryingly maintained, and it has achieved such a high reputation that unscrupulous dealers have taken advantage of that fact to palm off inferior and cheaper seeds as "Sterling." In order to protect ourselves, our customers and the good name of our "Sterling" Brand, every bag of grass or clover seed put out by us under the name of Sterling, will be sold only in our sealed bags—every package bearing our name, our trade mark, and sealed at the top with a metal seal. None other is genuine. As the contents of a bag, can not be identified once the seal is broken, purchasers should always insist on getting our original packages. All quotations made by us on Sterling Brand seeds include bags free.

We wish to call attention to the fact that in cleaning seed so as to make our Sterling brand, there is much seed removed which, while not of sufficient high quality to equal Sterling, is suitable for seed, and this is sold under lower grades, such as Fancy, Choice, Prime, etc. We do not quote these grades in our catalogue as most of our sales are for Sterling brands. Our Red Figure Price List quotes all grades.

Our Prices. Please Read Carefully.

Prices on Grass, Clover and Millet seed fluctuate so greatly that it is impossible for anyone to accurately gauge future values. We have therefore decided to issue throughout the season, as frequently as market conditions seem to render it desirable, a Special Red Figure Price List, which will keep customers in touch with the actual value of seeds. We shall not scatter these special Red Figure Price Lists indiscriminately, but will promptly mail a copy of same upon receipt of a request for it, from those who wish to buy grass and clover seeds. Remember, a postal card will always bring one to you by return mail. Write us for it when you are ready to buy. These prices will be maintained as long as possible, but we reserve the right to forward seed to the value of the money sent us, according as the market is higher or lower. We wish to assure those who buy late in the season and have not time to write us for prices, that they will receive fair treatment at our hands, and unless otherwise advised we will reduce or add to the quantity ordered sufficient seed to give value for the amount of money remitted. We cannot emphasize the fact too strongly to those who do not wish to buy now, that it is to their advantage to write for our Special Red Figure Price List, and samples of our Sterling brand of any variety of seed they want. A very large percentage of our customers now purchase our Sterling brands (sold in sealed bags only) of grass, clover and millet seeds exclusively, and will not have any other. They have found it to their interest to pay a little more for this brand and be absolutely assured that they are getting as fine seed as money can buy. See page 110 for illustration of the Sterling Seal.

What the Microscope Reveals.

The photographs shown on this page are all magnified several diameters to more clearly demonstrate that which is not fully understood by those unfamiliar with the handling of grass and clover seed. The pictures numbered 1, 3, 5 and 7 are Northrup, King & Co.'s Sterling Brands of Medium Red Clover, Timothy, Alsike Clover and Montana Alfalfa respectively. It will be noted how pure and plump are these brands of seeds. On the other hand, the pictures numbered 2, 4, 6 and 8 are ordinary grades of seeds commonly offered on the market. The magnifying glass readily detects the weed seeds of all kinds, broken sticks and straws, immature, brown and shrunken seeds, dirt and refuse which are not only of no value, but prove of considerable loss and harm. These impurities pass by unnoticed until placed under the microscope. To avoid the sowing of weeds on your land and to receive real value for your money, it is always good judgment to purchase our Sterling Brand, which is cheapest in the end.

TIMOTHY SEED.

Timothy is the best known, most extensively sown and one of the most profitable grasses grown in this country. Having a large bulk of stems, with few leaves, the hay wastes little in transportation. The grass stands up well, the hay is easily cured and heavy for its bulk.

Timothy is very easily established, the seed is inexpensive, and easily sown. It starts rapidly and often yields its best crop the year after sowing. It is extremely hardy, enduring extremes of heat and cold. It does best on moist, clay soils.

Characteristics. This grass has shallow, fibrous roots, growing in stools and never forming a compact sod. Timothy increases by multiplication of bulbs, just as some onions do. These bulbs, at the base of the stalk, store food for future plant growth. As the plant ripens, nourishment is stored in these bulbs as well as in the seeds. If Timothy is cut too early, the bulbs are weakened and the stand decreases. These bulbs also increase and store up nourishment in the fall while the aftermath is growing; therefore it is likely to injure the meadow seriously if it is pastured in the fall. It should never be pastured unless the aftermath is unusually heavy, due to a wet fall.

Timothy rapidly exhausts the soil nitrogen and so the meadows are great-

ly improved by a dressing of stable manure or other fertilizer. The latter should contain a large amount of nitrogen. Clovers grow well with Timothy and aid it by supplying nitrogen. Medium Red Clover makes a good combination with it and together they form the standard crop for mowing and pasture lands on the majority of farms in the northern and middle states. For a mixture of Timothy and Alsike, see below.

Timothy is useful for seeding mountain pastures on ranges in moist areas. It is not suited for a permanent pasture as it will run out in the course of a few years. It is, however, well adapted to early spring grazing as it starts up quickly in the spring before Blue Grass. The largest crops of hay are raised on rich land. It is not suited for light, sandy soils so well as other grasses.

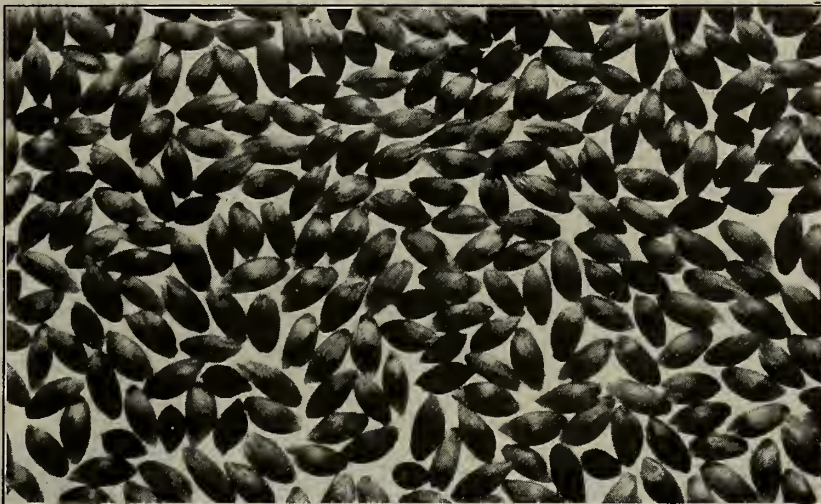
Harvesting. Timothy hay has a higher feeding value when it is cut early. There is usually a large shrinkage when it is cut before blooming. Consequently, it is best to cut it while in bloom or very soon afterwards. The usual yield is one and one-half to three tons per acre.

Seed Selection. The most important point in the growing of Timothy is the selection of good seed. Poor seed, besides containing weed seed will not all grow. That which does germinate is weak and produces few stalks and seed heads. It should not take an intelligent farmer long to figure the wisdom of investing his time and money in reliable seed, and that means "Sterling" Brand. Only ten pounds of this brand required to the acre when sown alone.

Prices. Owing to the unsettled condition of the market we are not quoting the price of Timothy in this catalogue. For prices see our Red Figure Price List which is enclosed in this book. These lists are dated. As prices change frequently, a new Red Figure Price List with latest quotations will be mailed you free of charge, promptly upon request.



A Single Plant Grown from One Seed of Northrup, King & Co.'s "Sterling" Brand Timothy.



Photograph of Northrup, King & Co.'s "Sterling" Brand Timothy Seed enlarged twenty times. Note the purity, plumpness and freedom from fowl seed.

ALSIKE CLOVER and TIMOTHY MIXED.

Where Alsike Clover and Timothy are grown together, and the seed is saved therefrom, it is impossible, in cleaning, to make a complete separation of the two.

On this account we purchase the seed for less money and we can sell it for less money than would be the case if a perfect separation could be made.

Those desiring to sow Alsike and Timothy together can save considerable money by buying the seed of these two varieties together as originally harvested.

The Minnesota Experiment Station recommends using Alsike in all Timothy and Medium Red Clover mixtures. The Alsike tends to increase the forage crop and in addition will replace the Red Clover as the latter begins to die out, since the Alsike is a hardy perennial and does not easily winter kill.

For hay, the Alsike and Timothy Mixture is very valuable on soils too moist for Red Clover. Alsike is suitable for either hay or pasture. It is finer and more leafy than Medium Red Clover and cattle prefer it. For prices see our Red Figure Price List.



Harvesting Timothy for Seed in Minnesota.

FACTS ABOUT CLOVER

Minnesota and Northern Wisconsin now produce the finest quality of Clover seed grown in the United States, and seed commanding the highest prices for the export trade.

The Fertilizing Value of Clover. This plant is familiar to all farmers, in a general way, yet there are many things in regard to its habits, variations and other peculiarities yet to learn. The expression, "To live in Clover" has become proverbial, and immediately suggests fat cattle standing knee deep in a rich clover field. Someone calls the plant "The red plumed commander-in-chief of the manurial forces." Many authorities agree that "Clover is the best manure a farmer can use." It is practically "a trap for nitrogen," as it collects it from the air and supplies large quantities of nitrogen in a form ready to nourish growing crops.

"Clover hay or sod contains enough phosphoric acid for more than double an average crop, enough nitrogen for more than four average crops, and potash for more than six average crops of wheat!"

A two ton crop of Clover, when plowed under, will supply more nitrogen to the soil than twenty tons of fresh, straw-made manure, or twelve tons of ordinary barn-yard manure.

Clover roots are stronger and more numerous, and more leaves fall on the ground, when it is grown for seed, than when it is mown for hay; in consequence more nitrogen is left after clover seed than after hay, which accounts for wheat yielding a larger crop after Clover seed than after hay.

Its Feeding Value. At the Wisconsin Experiment Station Red Clover has yielded the great amount of twenty-five tons of green forage per acre. From one-half to two-thirds of this yield may be relied upon by the stockman as a fair crop under average conditions.

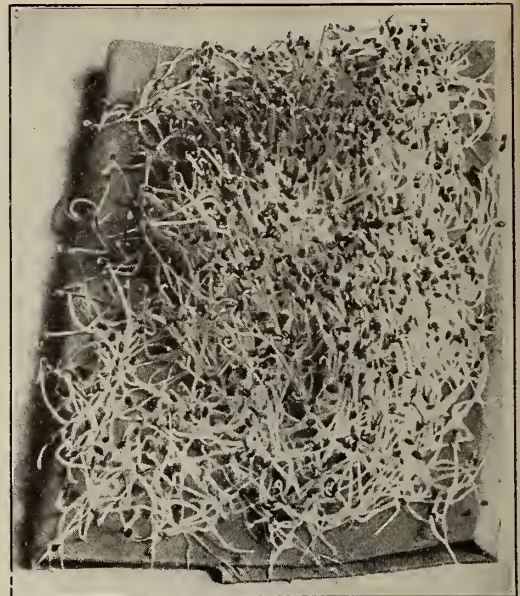
Clover gives the largest returns of protein, the flesh and blood building element in feeds, when the heads are in full bloom or just past that stage. Thus the crop would need to be cut when in full bloom to make the richest hay. It is true that clover hay is easier to cure if not mown until the blossom heads are all brown, but such hay loses much of its feeding value. So, considering both factors it is best to cut Clover for hay when one-third of the heads are turning brown. Clover hay is exceedingly valuable for cows. It furnishes the large amount of protein and ash essential for milk and is palatable and much relished. With well-cured clover hay forming one-half or two-thirds of the roughage of the ration, the dairyman can cut down the amount of grain, thus reducing the cost of feed.

Northern Grown Clover Seed. By using northern grown seed, Clovers may be established in sections where, until recently, it was not thought possible for them to survive. They are now grown even in North Dakota, close to the Canadian line. This means that the producing and sale value of these lands have increased many times. Northern grown seed is also more productive.

Some time ago, one of the most prominent seed dealers in Indiana (one of the largest Clover states) insisted upon buying a carload of our northern grown seed although we told him that we did not have enough for our regular trade. He finally said "I must have it. I have some customers who will buy nothing else." Then he described some of his own experiments in which he had discovered that northern grown seed gave over twice the yield of hay, that Indiana seed produced when grown in adjoining fields under the same conditions. His conclusion was, "If I were farming, I would not use any but northern seed if I could have other seed as a gift."

Our Clover Seed being grown in the North inherits three essentials for successful Clover production:

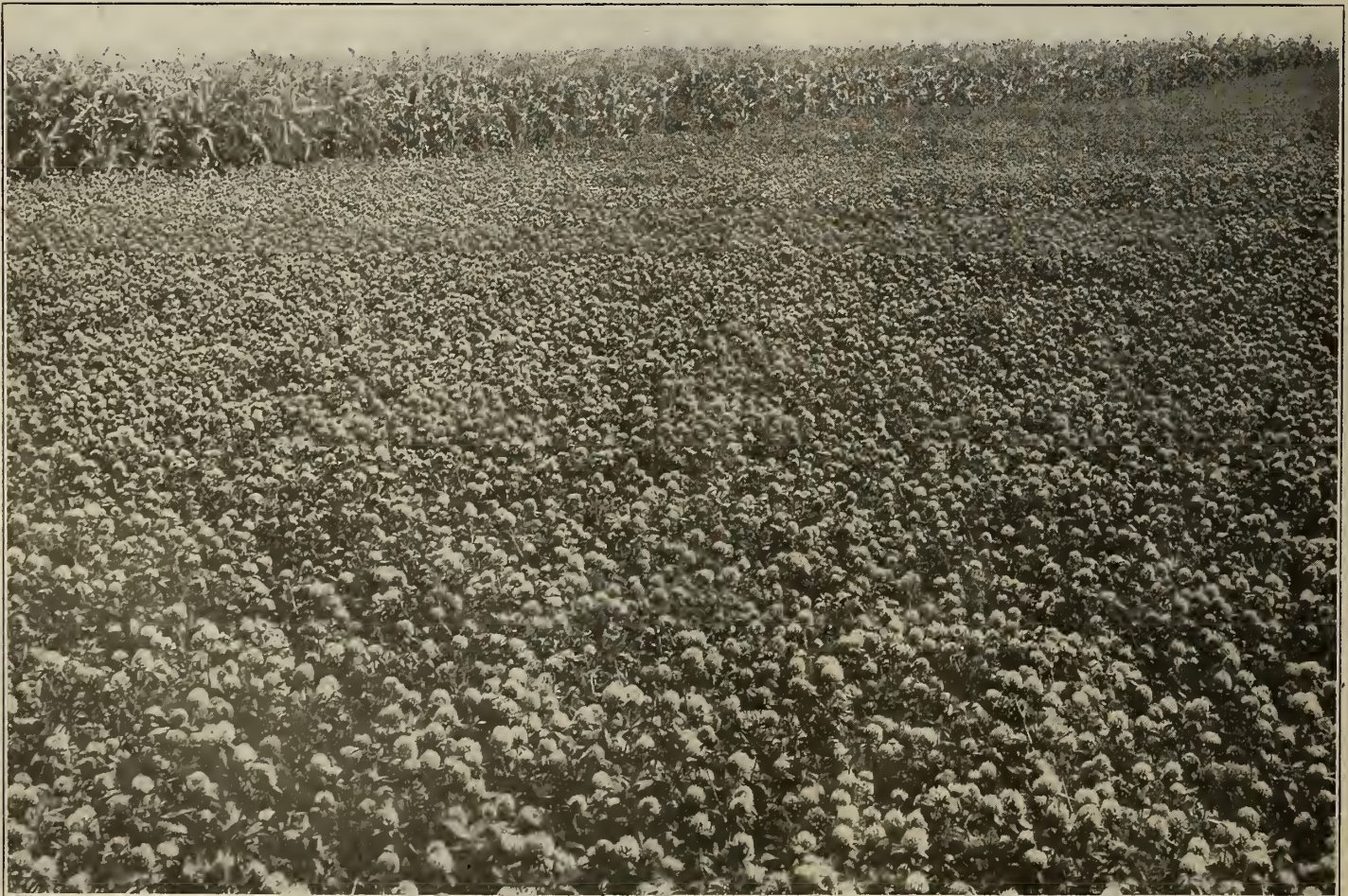
1. Earliness, because of the short season in which it matures.
2. Hardiness, because of the severe conditions which it survives—extreme cold of winter, alternate freezing and thawing of spring and fall.
3. Heavy yields, as has been demonstrated by comparative tests with Clover Seed grown elsewhere.



A Germination Test of our Clover Seed, 100 per cent.

About Quality of Clover Seed.

A large and increasing proportion of the orders we receive for Grass and Clover seeds is for our Sterling Brand, because of the fact that our customers have learned that the best seed is the most economical regardless of the cost. Seed cleaned for our Sterling Brand must in every instance, come up to a certain standard before it can be sold as Sterling and no seed will go out under that name that is not of absolutely known quality. Every year, however, there are some sorts which, owing to climatic conditions, are never produced of a quality sufficiently good even with proper cleaning, to equal Sterling. In such instances we offer our customers the very finest grade that the season has produced. We will cheerfully submit for comparison samples of all grades when desired.



A photograph of a northern Clover field. Note the heavy, even stand which northern grown Clover seed produces.

CLOVER SEED.

Prices. The Clover Seed market is so unsettled that we are listing no prices on Clover in our catalogue. For prices on all varieties, see our Red Figure Price List which is enclosed in this book. These lists are dated. As prices change frequently, a new Red Figure Price List with latest quotations will be mailed you free of charge, at any time, upon request.

Medium Red Clover. This is regarded as the most valuable of the Clover family. It is sometimes called June Clover and is a dependable all-round variety for farmers and stockmen. It makes two crops each year. The first is usually cut when it is in blossom for hay; the last crop may be harvested for seed, cut for hay, or plowed under to add fertility to the soil. It may be sown either in the spring or fall, and if no other grasses are used, at the rate of from 8 to 12 pounds to the acre, according to quality of seed used and condition of the soil. Clover adds greatly to the fertility of the land on which it is grown. It does not exhaust the soil, but enriches it. It pays always to buy the best quality of Clover seed which can be obtained. Even though the first cost is twice as much as cheaper seed, it will be found in the long run that inferior seed is the most expensive, not only on account of less hay or seed being produced from it, but from the fact that one's land becomes infested with weed seeds which decrease the value of the land on which they are growing. Our Booklet on Clover contains information of value to every farmer and stock raiser. It will be sent without charge, upon request.

It has been demonstrated time after time that crops following a growth of clover are larger and of better quality than when grown on land which has produced the same crop for a series of years. Clover should be rotated with grain crops every three to five years. The small nodules or bacteria which cling to the rootlets possess the power to draw the nitrogen from the air and store it in the soil where it is most needed and where it can be drawn upon by subsequent crops. It is well to sow clover with every crop of hay. It serves to keep the ground free from weeds, restores fertility, and may be pastured in the fall, or will repay the grower even if put to no other use than to be plowed under as a green fertilizer. Sow Red Clover Seed and plenty of it. For price, see our Red Figure Price List enclosed or a new one will be mailed promptly on request.

Mammoth Red Clover. This is grown largely for pastures and to restore fertility to depleted soils. It makes good hay if cut soon enough although it has a coarser stem than the Medium Red Clover. Mammoth Red Clover supplies fine grazing for stock. It sometimes yields more seed than Medium Red Clover. Being a rank grower, it is very valuable for fertilizing purposes. The foliage, flower and stem are darker in color than the Medium Red Clover. It ripens later, and makes only one crop. Especially valuable on light, sandy lands. Eight pounds of Sterling brand seed are sufficient to sow an acre on good soil. For price see our Red Figure Price List.

Alsike or Swedish Clover. This is one of the hardiest varieties known. It is perennial and does not winter kill. It will do better on moist land than any other variety of Clover, and is suitable for either hay or pasture. When sown with other grasses, it forms a thick undergrowth and greatly increases the yield. It is frequently sown both with Medium Red Clover and with Timothy, and the quality of hay thus produced is excellent. It is finer and more leafy than Medium Red Clover, although it does not grow so tall. It is very fine for honey bees, and cattle prefer it to other Clovers. For price see our Red Figure Price List.

For Alsike and Timothy Mixed see page 137.



White Blossom Sweet Clover. Note the Strong Crowns.



Alsike Clover. Valuable for Both Pasture and Hay, Especially in Combination with Timothy.

White or Dutch Clover. A low, close growing clover; round, white heads, very fragrant. Very desirable for beautifying the lawn. It will stand close cutting and very rapidly throws up an abundance of leaves and blossoms. It is usually better to sow with other grasses. Does well on most any soil. Oz., 10c; ¼ lb., 20c; lb., 50c. If wanted by mail add postage at rates on page 1. See our Red Figure Price List for prices on large quantities.

Sainfoin or Esparricette Clover. A vigorous perennial growing about three feet high. The flowers are numerous and bright showy red. It produces two crops in a season. It is usually grown only two years on the same land and is then turned under as a green fertilizer. Valuable for growing on poor land and barren hillsides. On good land it yields heavily. It does not bloat cattle and sheep and is therefore sometimes preferred to some other crops for pasture. Sow in the spring either with or without a nurse crop at the rate of 30 to 40 lbs. per acre and cover well. See our Red Figure Price List for prices.

Crimson or Scarlet Clover. An annual of strong, erect growth, one to two feet high. It roots deeply and places in the soil an abundant supply of nitrogen. Grows luxuriantly on fertile loam and does better, as a rule, on poor or thin soil than Red Clover. When plowed under it adds to the soil a large amount of humus or available plant food, thus enriching the land and preparing it for other crops. Sow 10 to 15 lbs. of seed per acre in the spring. See our Red Figure Price List for prices.

SWEET CLOVER.

Alfalfa's Twin Sister.

White Blossom or Bokhara. *Melilotus Alba.* Sweet Clover is grown for bees, for hay, for green forage, for its value as a pasture plant and as a soil fertilizer and restorer. It gives promise of becoming a rival of Alfalfa on many soils. Until recently Sweet Clover has been regarded by many as a troublesome weed. Its real value is beginning to be appreciated.

It is a biennial plant and bears close resemblance to Alfalfa but it is larger and coarser in growth. It will grow on soils on which Alfalfa cannot thrive and will make excellent growth on lands so hard and barren that they will sustain scarcely any other vegetation. It is the first plant to grow in the spring and furnishes an abundance of succulent pasturage, equal in quality and value with Alfalfa.

Some claim that stock will not eat it, but as soon as they acquire a taste for it, they frequently consume it in preference to Alfalfa or other pasturage. Early spring is an excellent time to teach them to eat it. Cattle fed upon Sweet Clover will not bloat.

When grown for hay, one crop and sometimes two may be cut the first season. The second year, two or three crops may be cut. It should be mowed just before it commences to blossom and before the stems become hard and woody. As it is tall growing and stools very freely, the yield of green forage is tremendous.

Sweet Clover is a biennial, that is, it lives but two years. At the end of the second season the tops and roots die. If the plants are not allowed to go to seed, its growth may be easily controlled. The root growth is very large and fleshy. When the plants die, they add to the soil immense quantities of nitrogen and humus, restoring old, worn out lands to crop producing ability.

Sweet Clover has the same bacteria as Alfalfa and thus will prepare the way for that valuable crop. If a permanent Sweet Clover field is desired, the second crop may be allowed to go to seed and there will be a splendid stand the following year.

We recommend the cultivation of Sweet Clover for pastures, for hay and for renewing worn out lands. If handled properly it will well reward the grower. We suggest that you do not let it go to seed. It can then be controlled at all times. See our Red Figure Price List for prices.

Yellow Blossom. *Melilotus Officinalis.* This variety belongs to the same family as white blossom sweet clover but it is not so prolific in growth, will not produce so large a tonnage, does not grow quite so tall, but is from ten days to three weeks earlier.

The flowers are yellow instead of white. For bee pasture and fertilizing purposes, we believe it to be equally valuable, but for hay or pasture it is not so desirable. See our Red Figure Price List for prices.

"Nitragin" for inoculating Clover will be found on page 141.

ALFALFA OR LUCERNE

See also pages 141, 142 and 143.

FACTS ABOUT ALFALFA.

The U. S. Dept. of Agriculture says: "In addition to the hay crop, Alfalfa at two years adds \$100 to the value of every acre on which it grows."

"There is no state in the Union in which Alfalfa cannot be successfully grown."

Alfalfa produces from 3 to 7 tons hay to the acre.

It has as much protein as Wheat bran.

360 stalks have been grown from one seed.

It does not exhaust the soil, it enriches the soil.

It will grow 3 to 5 crops a year.

Alfalfa in money value is worth 45 per cent. more than other Clovers and 60 per cent. more than Timothy.

Ten milch cows can be fed on less than 2 acres by soiling.

One acre will pasture 20 pigs for 6 months.

Three pounds a day makes a full feed for fattening lambs.

Four to five pounds makes full feed for fattening aged sheep.

Thirty-five pounds makes full feed for fattening steers.

Sheep fed on Alfalfa will gain from 8 to 15 pounds in 75 days and will double with small grain ration added.

Lambs wintered on Alfalfa will produce one to two pounds more of wool than when on the ranch.

Fed to dairy cows Alfalfa maintains the flow of milk equal to June Grass. It can be chopped fine with corn meal. Such a mixture is worth more a pound than the original corn meal.

Many interesting facts in addition to the above might be cited about Alfalfa. It would hardly be possible to say too much about Alfalfa, it is a working plant which is changing the destiny of many farming sections.

"Its long, branching roots penetrate far down, push and crowd the earth this way and that, and thus constitute a gigantic subsoiler. These become an immense magazine of fertility. As soon as cut, they begin to decay and liberate the vast reservoir of fertilizing matter below the plow, to be drawn upon by other crops for years to come."

From its original home in Asia, Alfalfa has been carried to all parts of the world where agriculture is important. The name "Alfalfa" is Arabic for "the best fodder." It has been grown in the eastern states for 200 years and is now the staple leguminous forage crop throughout the western half of our country. Alfalfa has been grown successfully in Minnesota for over fifty-five years. Descriptions of varieties suitable for this and other extreme climates are to be found on page 142.

Characteristics. One of the most important characteristics of Alfalfa is the long tap root, frequently extending fifteen or more feet into the soil. Unlike most farm crops, Alfalfa makes nearly all of its growth below ground the first season. The deep growing roots penetrate the sub-soils and bring to the top soil the phosphorus and potash stored below, making them available as plant food for the succeeding crop. After the great roots decay they form passages for air and water, besides leaving openings for the roots of the next crop.

As a soil builder, the Iowa Experiment Station claims that an acre of Alfalfa adds over twice as much nitrogen to the land as the average acre of Red Clover. Nitrogen is the most important element in the soil and the one most likely to give out. Alfalfa does not ask the farmer for nitrogen because it gets its nitrogen from the atmosphere.

Few general rules can be laid down for Alfalfa culture since different conditions require different methods. One must study the requirements of the plant and treat his land to meet these needs.

In order to find out in the shortest time what treatment any particular land needs, whenever doubt exists, it is well to plant quarter acre test plots, using lime on one plot, a liberal dressing of manure and lime on another, manure without lime on a third, no lime and no manure on the fourth, as a check on the first three. The method giving best results can be applied to a large acreage the succeeding season.

Where the preparation of the soil and time of seeding are important factors, the experiments can be made along these lines.

RULES FOR SUCCESS.

1. Plant in deep, loose, friable soil. If the soil is shallow the Alfalfa plant cannot utilize its deep-feeding root system and is likely to be choked out by surface-feeding weeds. The roots can, however, penetrate rather stiff, clay soils and sometimes go through hard-pan. Soils that are light on account of being sandy usually lack fertility, but this can often be corrected by the free use of manure. Good fields are sometimes found on heavy clay soils.

The seed bed should be fine on top, but well settled. It usually requires six weeks for plowed land to settle enough for seeding. The land should be disked and harrowed right after plowing. Then work it every ten days or two weeks until the seed is sown; this will insure sufficient moisture for germination. When late seeding is practised, begin to cultivate as soon as the preceding crop is removed.

For some soils disking is sufficient. This is of course less expensive than plowing and it does not take so much time for disked land to settle as it does for the plowed land. The preparation must be uniformly good, as the poorly prepared spots are sure to fail and become weed centers later. Summer fallowing is often practised in the semi-arid regions to conserve moisture for germination of seed at planting time. This is also effective in ridding the soil of weeds.

For sandy ground apply a light top dressing of straw or coarse manure just before seeding to prevent the soil from drifting, or sow the Alfalfa in a thin stand of small grain, such as barley.

2. The soil must be well drained. Alfalfa does not thrive where the water table is within six feet of the surface.

The land must be well drained, either naturally or by the use of tile or open ditches. Fine results have been obtained on drained bottom-lands. Land slightly rolling or nearly level and well drained is usually considered the best. Alfalfa is often killed by overflow from streams. During the growing period it will not usually stand more than twenty-four hours of complete submergence or forty-eight of partial overflow.

When sown on land with dry sub-soil, the roots penetrate, for a few inches through the moist top soil and then reach the dry, hard sub-soil located perhaps at the bottom of the furrow slice. Being unable to penetrate this dry soil, the roots stop growing or run horizontally in the bottom of the furrow, thus forming only a shallow root system. To prevent this condition, either plow in the autumn or else wait six weeks for the ground to settle before planting Alfalfa in the spring.

3. The soil should be very fertile. Well rotted, barnyard manure is usually the most satisfactory fertilizer for Alfalfa. Fresh manure often contains weed seeds, so when its use is necessary it should be applied to the preceding crop so as to give the germinating weed seeds time to be destroyed by cultivation. Eight to ten tons of good manure per acre should be applied before plowing. Plowing under green manure crops helps to increase the humus content in the soil and this is what many soils require. For the Northwest, Red Clover is probably best for this purpose.

This should be followed with some clean-culture crop, like corn or potatoes. If barnyard manure is not available and if there is not time for a green manure crop, then apply commercial fertilizer if the soil lacks plant food.

Alfalfa when established is a very strong grower, but when the young plant starts it is a weakling and must have plenty of available food, in order to make a good growth the first year. Then it will develop a strong tap root which will help it winter well and start vigorously the following year.

When there is uncertainty as to the best kind and quantity of fertilizer to use it is well to experiment by test plots as suggested above.

4. Inoculation is necessary. Inoculation means putting or planting in the soil, nitrogen-fixing germs or bacteria without which the Alfalfa cannot flourish. Where Sweet Clover grows wild, in the field or along the roadside, artificial inoculation for Alfalfa may not be necessary as the same germs grow on the Sweet Clover as on Alfalfa and natural inoculation takes place. But there is no other plant which commonly grows wild in the North that can support the same germs as the Alfalfa. All the legumes including clover, peas and beans bear bacteria but a special kind lives on each plant.

These germs on the Alfalfa roots form nodules from the size of a pin head to a pea. See illustration of nodules on an Alfalfa root on the opposite page. Each nodule contains a colony of germs which keep taking nitrogen out of the air and forming nitrates. From nitrates the plant roots draw their nitrogen, since the plants cannot use nitrogen direct from the air except to a very limited extent. Thus the germs or bacteria on the roots prepare some of the air nitrogen so that plants can feed upon it.

There are several methods of inoculating Alfalfa seed but we recommend the use of Nitragin as described on the opposite page.



Hogs in Alfalfa Pasture. An average field will support 10 large hogs during the growing season.

Another form of preparation is to sow a few pounds of Alfalfa seed on the field two or three years before it is intended to seed a regular Alfalfa crop, putting it in with grain, clover or any other seed used. If this is undesirable it often pays to plant a small amount of Alfalfa six months to a year before the regular crop. Probably the seed carries a few germs, and in time these plants will often develop nodules.

5. Use Lime for Soil Acidity. Alfalfa will not grow where the soil is acid. This is often the case where corn and wheat have been raised for many years. A simple test for acidity is to make a deep cut in the ground with a knife, pressing the earth slightly apart, then push a piece of blue litmus paper (procureable at any drug store) into the opening, press the earth together and leave it for several hours. If the paper turns from blue to red it is proof of acidity. This test should be tried in several parts of the field to insure correct results.

Lime is the principal material needed to sweeten acid soils. It is also as necessary for plant growth as nitrogen or phosphorus. If agricultural lime does not cost over \$3.00 per ton it is better to use it than burned lime which is caustic. Up to two tons per acre of caustic lime, if well distributed, is safe to use. If ground limestone is applied, it should be very finely ground and spread at the rate of 1500 to 3000 pounds per acre.

Alfalfa requires for its best growth a large amount of calcium, the active part of lime. The nitrogen-gathering bacteria which live on the Alfalfa roots and furnish the plant with most of its nitrogen cannot live, thrive and multiply in an acid soil.

Lime is to be applied after plowing and thoroughly disked in, preferably some weeks in advance of seeding. It may be spread from a wagon with a shovel, or with a manure spreader or broadcast grain seeder. There is little danger of using too much lime.

6. The land must be free from weeds. Young Alfalfa plants are very tender and are likely to be killed by weeds during their early stages of growth. On this account the land should be as free from weeds as possible. Raising a cultivated crop or a crop like clover, which naturally prevents weed growth, will help to check weeds. If a weedy soil must be used, plow the land several months before seeding the Alfalfa and destroy the weeds as they appear by frequent harrowings. Weeds are especially harmful to spring-seeded Alfalfa, so for this reason spring seeding should be avoided in some sections.

The choice of a crop to precede Alfalfa depends upon the proper time for seeding Alfalfa. For example, early potatoes can be used before late summer seeding which would be impossible where early Alfalfa seeding is desirable.

7. Selection of Seed is most important. Poor seed is a primary and great cause of a poor stand. In buying Alfalfa Seed the highest priced seed is often the cheapest. The loss is much greater in using seed of poor quality, than the difference in cost of the seed. This loss comes from the labor thrown away, the stands lost and yields sacrificed by its use, as well as the final expense in getting rid of the weed seeds introduced.

If seed germinates poorly, one must either plant more seed or expect a thin stand. Small, shrunken seed will not produce vigorous plants. Weedy seed means the introduction into the field of plantain, dodder, thistle, mustard or some other pest, ready to take advantage of the fine fertile soil and undo the work of two years' preparation.

Our Sterling Brand Alfalfa is as plump and fine colored seed as grows. It is selected from the best seed produced and must comply with our standards

of purity and germination. Send for sample for analysis and microscopic examination which will then prove its value.

8. Decide the best time of seeding for your locality. Sow Alfalfa Seed as far in advance as possible of what is likely to be the most trying season for the young plants. Early spring sowings usually give best results in the Northwest as the plants then become established before winter. For this region therefore we advise sowing from early May to July. The Iowa Experiment Station recommends August sowing for that state, since weeds are the greatest danger there. Alfalfa must be well rooted and of considerable size before cold weather, otherwise it is likely to winter kill in the absence of snow.

9. Sow the seed so it will be covered. Alfalfa Seed must be covered, not sown on the surface, as is sometimes done with grasses and clovers. It may be planted with drill or seeded broadcast by hand, hand seeder or wheel barrow seeder. It is advisable to sow half the seed one way across the field and the other half at right angles to the line of first sowing, to secure an even distribution.

Depth of planting depends upon the soil. Covering three quarters to one inch deep is usually sufficient on clay soils, but one and one-half inches deep is required on sandy soil, or in the semi-arid sections. When sown broadcast, a light harrow, weeder or brush is used to cover seed.

10. Use plenty of Seed. Much more seed is required in the humid sections of the country than in the semi-arid and irrigated districts. Good stands from five pounds of seed per acre are not rare in the West. For the central and eastern states ten to twelve pounds per acre is the usual amount and this may be increased to twenty pounds if it is necessary for the Alfalfa to cover the ground from the start, to prevent weeds from becoming established. The quantity to sow will also depend upon the condition of the soil as to moisture, the weather conditions and seeding method employed. With land prepared by sowing a few pounds of seed six months to a year preceding, with a heavy application of stable manure plowed under six months before, perfect soil preparation, normal moisture, clean seed of high germination—10 pounds of seed per acre should be sufficient. Alfalfa is a desert-like plant and does best by itself. For this reason, where for any cause it is very hard to get a stand in the usual way, the seed may be sown in garden rows cultivated one season like a truck crop, and the plants transplanted the following spring. For Alfalfa Plants see page 143.

11. Using a nurse crop often advisable. Weeds are likely to prove troublesome for spring seeded Alfalfa unless the ground is clean from previous cultivation. A nurse crop helps to check the weeds until the Alfalfa Seed starts. The nurse crop takes some of the moisture and plant food from the Alfalfa and shades it. But it gives the advantage of planting the Alfalfa with little additional expense, except the cost of the seed. Moreover by this method it is not necessary to give up the use of the land for a whole season to get the Alfalfa established.

Barley, wheat or rye are better for a nurse crop than oats. Oats require more water and give too much shade. Do not sow Alfalfa seed with the grain, but plant each separately. Reduce from one-third to one-half the regular rate of grain seeding when using it for a nurse crop.

Our Alfalfa Booklet describes treatment after planting. See the next page for particulars.



Nodules, or knots, formed by bacteria on Alfalfa roots.

The Improved German Soil Inoculator, Nobbe-Hiltner Process

NITRAGIN

TRADE MARK REG'D DEC. 6, 1898 NO. 32,212

PURE CULTURE

THE SIMPLEST SAFEST AND SUREST SYSTEM
OF SOIL INOCULATION FOR ALL LEGUMES



Nitrogen gathered by the germs, or bacteria, is stored in knots, or nodules, on legume roots. Part is used by the growing crop, part goes to the soil to benefit succeeding crops. Experiments prove an inoculated legume crop returns to the soil an average per acre of 122 pounds nitrogen yearly.

Nitragin is the trade mark name for the special germ, or bacteria, that acts on the legume root, draws nitrogen from the air and converts it into plant food. It tends to give a uniform "catch": the crop grows quickly; it is strong, hardy and healthy—deep-rooted—rich in food value. Meanwhile your soil is growing richer instead of poorer—your land more valuable. Failure with legumes is often due to a lack of bacteria.

Nitragin helps to insure a Catch of Alfalfa.

If your past experience with these profit crops has been unsatisfactory it may have been because your soil lacked these vital, strength-giving germs. Some soils have only a partial supply: in other soils the germ is missing or so sickly as to be worthless. Such soils need Nitragin Pure Culture to supply an abundance of pure healthy, strong, virile bacteria. This means a profitable crop and new life to the soil. Nitragin Pure Culture has been used abroad for seventeen years. Last year it was used on more than a million acres. This year you should use it on your Clover and other legumes.

Nitragin solves the Alfalfa inoculation problem, helping to make legume growing more profitable. Successful inoculation depends in great measure upon the number of germs available. In mixing with seed some germs adhere to the floor or box; others are lost in transferring seeds to drill or seeder; others adhere to the drill-box; some are improperly planted and are killed by the sun; some are destroyed by other unfriendly germs that live in certain soils. So the extraordinary number of germs in Nitragin Pure Culture—infinite more than in any other culture—provides for these losses and insures success, even under adverse conditions, where others fail. Each can of Nitragin contains billions of these necessary germs—in a strong, healthy condition, bred up to the highest possible state of efficiency, packed in ventilated cans—their health and vitality guaranteed for six months. Nitragin is easy to use. Simply mix with water and spread on the seed. As soon as seed is dry, plant as usual. A boy can do it—it's ten minutes work. Nitragin helps to obtain good catches—uniform, even stands; strong, healthy, deep rooted, sturdy plants that grow quickly and best withstand abnormal seasons and produce better crops—heavier yields of richer feeding value. Alfalfa, Clover, Soy Beans, Cow Peas—in fact, any seed legume can frequently be treated with Nitragin at a great profit. The cost is nominal. Dr. Lipman, of New Jersey Experiment Station, tried Nitragin Pure Culture; in Bulletin No. 226 he says: Alfalfa yield increase due to Nitragin was 500 per cent.

Pure Culture System endorsed by many Authorities.

The Pure Culture system of inoculating legumes is endorsed and recommended by U. S. Government authorities, by state experiment stations, by practical farmers and other agricultural experts in every section. These men have accomplished wonderful results with inoculated legumes. You can do the same on your farm by using Nitragin.

There is a special strain for each legume, including Alfalfa, Red Clover, White Clover, Alsike Clover, Cow Peas, Soy Beans, Vetch, Garden Peas, Garden Beans, and all other legumes. In ordering be sure to name the crop to be inoculated.

Price. Garden size, per can, \$1.00; acre size, per can, \$2.00; 5-acre size, per can, \$9.00, F. O. B. Minneapolis. Postage and express extra. Parcel Post, 10c per acre extra. Order Nitragin Pure Culture with your seed.

ALFALFA SEED

All prices on grass and field seeds are subject to market changes.

Northrup, King & Co.'s Sterling Montana



Grown Alfalfa.

(Sold only in sealed bags.) Montana produces a very fine grade of Alfalfa. The seed is usually exceptionally large and of high germination. Montana grown Alfalfa is extremely hardy and some prefer it to seed from any other locality. Our seed is obtained in those sections where plants have endured the extreme cold of winter and thrive in high altitudes. Not only has our experience of several seasons demonstrated the superiority of this seed under adverse climatic conditions throughout the entire Northwest, but more recent experiments of both the Minnesota and North Dakota Agricultural Stations have established the superior hardiness of Montana grown Alfalfa.

Prices, by express or freight, Northrup, King & Co.'s Sterling Brand, lb., 25c; bu. of 60 lbs., \$13.75; 100 lbs., \$22.50.
Fancy, lb., 25c; bu., \$12.40; 100 lbs., \$20.25.
Choice, lb., 25c; bu., \$11.20; 100 lbs., \$18.25.

Northrup, King & Co.'s Sterling Dakota



Grown Alfalfa.

(Sold only in sealed bags.) Experiment stations and other authorities all agree as to the advantages of northern grown Alfalfa seed. Even when the seed originally sown was not especially cold-resistant the more tender plants are soon eliminated, leaving the hardier plants to produce seed. Seed from such fields is always preferable for northern planting to seed produced farther south.

Our Sterling Dakota Grown Alfalfa is especially recommended for northern planting. This seed comes from long established fields. It is splendid, plump and fine colored. Our seed was grown at an altitude of between three and four thousand feet, where the rainfall rarely exceeds eight inches per annum. The temperature reaches both extremes, exceedingly hot and dry in summer and down to 30 to 40 degrees below zero in winter, with little or no protection by snow. Plants which survive these rigid tests are very hardy plants and the seed produced from these fields inherits the vigorous tendencies of the parent plants.

Prices, by freight or express, Northrup, King & Co.'s Sterling Brand, lb., 25c; bu. of 60 lbs., \$12.85; 100 lbs., \$21.00.
Fancy, lb., 25c; bu. of 60 lbs., \$11.90; 100 lbs., \$19.50.
Choice, lb., 25c; bu. of 60 lbs., \$11.50; 100 lbs., \$18.75.

Northrup, King & Co.'s Sterling American



Grown Alfalfa.

(Sold only in sealed bags.) For our plump and fine colored seed as grows. This seed is selected from the best seed produced. We will be glad to send a sample to any one about to purchase. When writing for sample, state quantity of seed you wish to buy. 10 to 12 lbs. are usually sown to the acre. The demand for Alfalfa has been increasing from year to year. It is desirable, therefore, that orders be sent in promptly. Values on all grades will be found on our Red Figure Price List which is issued from time to time during the season and will be mailed promptly to any address on request. The price we name below is that in effect at the time this catalogue is printed and is subject to change. Those wishing to buy Alfalfa seed for large areas will find it to their advantage to write for a special price in large quantities.

Prices, by express or freight at purchaser's expense, Northrup, King & Co.'s Sterling American Grown Alfalfa, lb., 25c; 10 lbs., \$2.00; bu., \$11.40; 100 lbs., \$18.50. Bags free.

Fancy, lb., 20c; bu. of 60 lbs., \$10.90; 100 lbs., \$17.75.
Choice, lb., 20c; bu. of 60 lbs., \$10.45; 100 lbs., \$17.00.

Alfalfa Booklet. This booklet is sent to our customers without charge if asked for on orders. It contains information of importance to Alfalfa growers everywhere but is of special value to those farming in the Northwest where conditions are so different from those in the South or where Alfalfa is grown under irrigation.

Dry Land Alfalfa. The extension of Alfalfa growing into the regions of limited rainfall has created a demand for Alfalfa seed especially adapted to those conditions. Seed which has been produced from Alfalfa grown on dry land and without irrigation is of course much preferable for dry land culture to seed produced under irrigation or normal rainfall. It is not always possible to obtain seed grown under these conditions, but we have succeeded in purchasing a limited amount of fine seed which is offered only until our stock is exhausted. The Alfalfa we offer as Dry Land is all its name implies. It was grown under severe conditions of low temperature in winter, usually with little or no covering of snow, and hot weather in the summer.

In case we do not have Dry Land Alfalfa when your order is received, we suggest that you state on your order the variety we may substitute in its place to the value of the money you send us; or, in the absence of these instructions, we will promptly refund your money if we do not have what is wanted. We never substitute without the consent of the purchaser. By express or freight at purchaser's expense, lb., 25c; 10 lbs., \$2.25; bu. of 60 lbs., \$12.25; 100 lbs., \$20.00. Bags free.

Turkestan Alfalfa.

This variety has been satisfactory in many sections and has become quite popular. In consequence over six million pounds of Turkestan Alfalfa seed is imported annually to the United States. This seed is grown on the high table lands of central Asia where the days are hot and the nights cold. It has been successfully grown for years in this country. The Minnesota Experiment Station reports that Turkestan Alfalfa has given good results in Minnesota. A successful Alfalfa grower has had years of experience in raising Alfalfa near Minneapolis where a temperature of 20 to 30 degrees below zero almost every winter tests the hardiness and vigor of all plant life. Not only low temperatures, but dry winds and little snow protection make winter conditions even more severe here. This grower reports great success with Turkestan Alfalfa and usually secures three cuttings of hay annually after his Alfalfa fields become established. Our seed is the genuine Turkestan, grown in Asia and imported from that country. Price, by express or freight, lb., 20c; 10 lbs., \$1.70; bu. of 60 lbs., \$10.90; 100 lbs., \$18.00. Bags free.

Grimm Alfalfa.

Many years ago a man named Grimm came from Germany and settled near Minneapolis. He brought with him seed of an Alfalfa, which according to a neighborhood statement, he called Norwegian Alfalfa. It became known, however, as Grimm's Alfalfa and obtained a more than local reputation on account of its productiveness and extra hardiness, for it survived winters that killed out many fields of other varieties of Alfalfa. Of course this was before the Montana, Dakota or any other northern grown Alfalfa seed was procurable.

From the appearance of the seed, Grimm Alfalfa cannot be distinguished from other varieties. A field of Grimm in bloom often shows a color variation in which shades of blue predominate, but occasionally yellow, brown or greenish blossoms appear. Neither the presence of variable blossoms nor a uniformity of color proves or disproves the genuineness of Grimm Alfalfa. Some fields of Grimm show all purplish blossoms while other varieties than Grimm sometimes show a decided range of color. Some fields of Grimm Alfalfa are in Minnesota in the region where it was first introduced. The climate in Minnesota is not suited to the production of Alfalfa seed. Only occasionally do the plants yield seed and then very sparingly. Because of the wet weather at blossoming time no Grimm Alfalfa seed was raised in Minnesota during 1914 so far as we have been able to learn.

Small patches of Grimm Alfalfa are grown in the Black Hills of South Dakota, among the mountains of Montana, Idaho and Oregon. From some of these we have secured limited amounts of fine Grimm Alfalfa seed which is offered subject to previous sale. When our stock is exhausted we will be unable to secure more until next season. We offer it at the following prices, as long as unsold. Lb., 75c; 10 lbs., \$7.00; bu. of 60 lbs., \$36.50; 100 lbs., \$60.00; by express or freight at purchaser's expense.

Nitragin. This is a splendid preparation of Alfalfa bacteria for inoculating the seed before sowing. It is sold ready for use and anyone can apply it by following the simple directions on the package. See page 141.



Alfalfa Hay in the cock. Land values are sure to increase, when three crops like this are cut each year.

ALFALFA PLANTS

A Sure Method of Growing Alfalfa.

It has given us great pleasure to be the first firm to offer Alfalfa Plants. We were confident that the use of plants would revolutionize methods of growing Alfalfa in many localities, and the success with which they were grown last season, strengthens our good opinion of them. Setting Alfalfa plants has made possible the production of abundant and profitable crops of hay where this valuable plant could not previously be propagated.

Although this plan is comparatively new and, until recently was not offered publicly, the transplanting of Alfalfa plants was practiced in an experimental way for some years by Prof. N. E. Hansen, connected with the South Dakota Agricultural Experiment Station at Brookings and by Prof. L. R. Waldron, Superintendent of the Dickinson Sub-Experiment Station of North Dakota.

We are now selling these plants in large lots to all parts of the United States. Last spring an order for 25,000 plants came to us from New York and another from Oregon. The price this season is very reasonable. Spring is a good time to set Alfalfa plants. Order early.

Advantages of Setting Plants Over Seed Sowing.

The advantages of setting plants over sowing seed are briefly set forth as follows:-

By setting plants a full stand is assured. Plants, such as we furnish, which are strong, healthy, well rooted, hardy stock, will thrive in most any soil. A crop of hay is much more quickly available for the reason that the plants are well established, have more room in which to develop, and will, in addition produce more hay. The absence of bacteria in the soil is no hindrance to the growth of Alfalfa plants, as these bacteria cling to the roots when planted and aid immediate growth. Alfalfa plants may thus be grown in soils where seed would not be successful. Hardy, one-year-old plants will also withstand drought which would kill out delicate plants grown from seed. The plants grow quickly after being set out and secure a foot-hold in the soil which dry weather cannot overcome. The method of planting in rows, which we recommend below, insures even distribution, thus avoiding root crowding and giving each plant sufficient nourishment. Transplanting produces a branching root which derives nourishment through fine, fibrous rootlets from near the surface of the soil. Well developed one-year-old plants only are furnished, which will produce strong, hardy plants. Thinning is unnecessary, for



A Bundle Containing 100 One-Year-Old Alfalfa Plants.



Individual Alfalfa Plants as they are Taken from the Ground.

the reason that the plants are properly spaced and each given the proper area in which to grow. By planting in rows the plants may be cultivated, thus keeping down the weeds, conserving moisture and largely increasing the yield of hay.

By root planting, Alfalfa bacteria are easily and permanently established in the soil with more certainty and less expense than by applying inoculated soil or by the use of commercial nitro-cultures.

Variety and Quality of Plants.

The plants are one-year-old hardy stock. The photographs on this page show clearly what we offer. The illustration of individual plants shows their branching character and the strong, well developed crowns. These plants were grown from Grimm Alfalfa seed on dry land, at an altitude of 3,150 feet, under the most unfavorable conditions. They represent, therefore, plants which survived a very rigid test.

How to Plant and Cultivate.

To secure best results, we recommend setting the plants in rows three ft. six inches apart and two to three ft. apart in the row. The soil should previously be well prepared, plowed deep and made mellow by successive harrowings. The plants may be plowed in by setting against a furrow and plowing against them. The crown should be set from one to two inches beneath the surface, as the soil will settle. Unless they are set as indicated the crown will be exposed. On small areas the plants may be set by using a spade. Insert the spade in the earth, push it forward and drop in the plant. When the spade is released the soil will settle around the root. On very large areas it will pay to use a transplanting machine which is adapted particularly for this purpose. Cultivation should begin immediately after placing the plants so as to firm the soil and make the field level. It will also result in keeping down the weeds and conserving moisture. The time to plant is in Spring or in September or October.

Prices.

Taking into account the heavy expense in gathering these plants and the scarcity of Grimm Alfalfa, our prices for this season are very reasonable. When planted as suggested, about 4,500 plants are required to the acre. We pack in bundles of 100 and prices are F. O. B. Minneapolis, and include packing charges. The plants should reach destination in first class growing condition and if planted out soon after arrival we believe every plant will survive. We will not make shipment of plants until the planting season, but suggest that orders be sent in immediately upon receipt of this catalogue as our supply is limited.

Per 100, 65c, (postpaid, 80c); 500, \$2.60; 1000, \$4.75. In quantities sufficient for an acre or more we will be glad to quote net price upon receipt of list of requirements.

About Ordering Early.

It may seem that we are unduly urgent in respect to sending orders early in the season, but we are compelled to disappoint so many of our customers who wait until stocks are exhausted, that we can see the great importance of attending to this matter as soon as possible.

GRASSES



Crested Dogstail.



Meadow Foxtail.



English Rye Grass.



Italian Rye Grass.



Meadow Fescue.

Creeping Bent Grass. (*Agrostis Stolonifera*.) Distinctive on account of its compact, creeping, rooting stems. Of rapid growth and spreading habit, forming a strong, durable turf. Fine for lawns and putting greens because of its fine texture. If sown alone, use 50 lbs. to the acre. Lb., 55c; bu. of 20 lbs., \$9.60; 100 lbs., \$45.00.

Crested Dogstail. (*Cynosurus Cristatus*.) A hardy grass forming a smooth, compact and lasting turf. Does best on rich, moist land, but will grow on most any soil. Roots deeply and withstands dry weather. Does well in the shade. If sown alone, use 30 pounds to the acre, but the best way is to mix with other grasses. Lb., 25c; 10 lbs., \$2.25; 100 lbs., \$21.00.

English or Perennial Rye Grass. (*Lolium Perenne*.) This is becoming well known in this country as a valuable pasture grass which will bear frequent close cropping. Produces an abundance of foliage, which remains bright and green during the season. The hay is relished by all kinds of stock. It will grow well on almost any land but does better on such land as will produce a good corn crop. The plants start early, flower early and repeatedly during the growing season. The leaves are abundant and the whole plant is nutritious. Lb., 15c; bu. of 14 lbs., \$1.30; 100 lbs., \$8.00.

Fine-Leaved Sheep's Fescue. (*Festuca Ovina Tenuifolia*.) A very fine-leaved grass. Thrives well on dry and sterile soils. Well suited for lawns. 30 lbs. per acre. Lb., 35c; 10 lbs., \$3.30; 50 lbs., \$16.00; 100 lbs., \$31.00.

Hard Fescue. (*Festuca Duriuscula*.) A valuable grass for dry lands and sandy soils, very hardy, enduring extremes of heat and cold and long droughts. Splendid for permanent pastures on poor land. Not recommended for lawns on account of its stolon habit. Sow 30 lbs. to the acre. Lb., 25c; 10 lbs., \$2.20; 100 lbs., \$20.00.

Italian Rye Grass. (*Lolium Italicum*.) This is, like the Perennial Rye Grass, valuable for pasture and also for hay. It thrives on rich, moist land, where from three to four cuttings may be made in a season. It grows very quickly and will stand close pasturage. About 24 lbs. of seed required to the acre. Lb., 15c; bu. of 14 lbs., \$1.35; 100 lbs., \$8.50.

Meadow Fescue or English Blue Grass. (*Festuca Pratensis*.) Especially suited for permanent pasture and is also fine for hay. Grows two to three feet high but not in tufts like Orchard Grass. The hay is very nutritious and cattle thrive on it whether dry or green. Succeeds even in poor soil, and as the roots penetrate deep, from 12 to 15 inches, it takes extremely dry weather to affect it. As a fertilizer it has valuable properties. It will stand freezing very effectually and its use is becoming more widespread each year. 24 lbs. are sown to the acre. Lb., 15c; bu. of 14 lbs., \$1.95; 100 lbs., \$12.00.



Hard Fescue.

Meadow Foxtail. (*Alopecurus Pratensis*.) One of the best grasses for permanent pasture, early and of rapid growth. Sow 30 lbs. per acre. Lb., 40c; 10 lbs., \$3.75; 50 lbs., \$17.75; 100 lbs., \$35.00.

Orchard Grass. (*Dactylis Glomerata*.) A valuable grass for pasture or hay land, and on account of its earliness is very valuable for a permanent pasture. It furnishes the first green grass in the spring and until late in the fall. When closely cropped it grows up very quickly and is ready for grazing again in 10 to 12 days. It will stand drought and is hardy. It grows in tufts, and is therefore best sown with Red Clovers, rye grass, etc. It is well suited for shady places, such as orchards and groves. Grows on all kinds of land but does best on deep, rich sandy loam or clay soils. Sow 22 lbs. to the acre. Price, lb., 25c; bu. of 14 lbs., \$2.90; 100 lbs., \$19.50.

Red or Creeping Fescue.

(*Festuca Rubra*.) A creeping-rooted variety forming a close and durable turf and particularly suited for dry, sandy soils. Resists drought and thrives on very poor soils, gravelly banks and exposed hillsides. Valuable both for shady lawns and for golf courses. 30 lbs. to the acre. Lb., 25c; 10 lbs., \$2.25; 100 lbs., \$19.50.



Wood Meadow Grass.

The prices herein are based on values at time of going to press with this catalogue. They are subject to market fluctuations. If desired by mail, add for postage at rate on page one.

Rhode Island Bent Grass. (*Agrostis Canina*.) Resembles Red Top, but is shorter and has narrower leaves. It makes a beautiful, fine, close turf and is one of the best grasses for lawns. It does well on both rich and poor soils. Makes excellent pasture but never grows high enough to supply a great quantity of feed. Sow with other grasses or if alone use 50 lbs. of seed an acre. Lb., 50c; 10 lbs., \$4.50; 100 lbs., \$42.00.

Sheep Fescue. (*Festuca Ovina*.) An excellent grass for poor, sandy soils. It is a perennial, densely tufted and of very fine foliage, making it well suited for lawns. It is also very satisfactory for pasturage, furnishing good grazing, especially for sheep. Resists drought remarkably well. Sow 40 lbs. per acre. Lb., 25c; bushel of 14 lbs., \$3.00; 100 lbs., \$29.00.

Tall Fescue. (*Festuca Elatior*.) Very early and nutritive; should form a part of all pasture mixtures on wet or clay soils. This valuable grass grows two to four feet in height, generally forming tufts or bunches. The roots are strong and woody, with a tendency to sucker. It is well suited for permanent pasture and is most productive three years after sowing. Lb., 30c; 10 lbs., \$2.70; 50 lbs., \$12.75; 100 lbs., \$25.00.

Tall Meadow Oat Grass. (*Avena Elatior*.) A hardy grass of rapid growth, luxuriant, and reaching a height of 4 feet on rich soil by June 15th. Makes excellent hay on sandy loams, but is particularly suited to rich soils and clay formations. If hay is desired, cut when in blossom. It has a wonderful capacity for enduring severe heat, drought and cold. It can be cut usually twice a year. To make good hay it should be cut immediately when it blooms. This frequently produces twice as much hay as Timothy. May be sown either in the spring or fall, 2 to 3 bushels per acre. Lb., 25c; bu. of 14 lbs., \$3.15; 100 lbs., \$21.00.

Wood Meadow Grass. (*Poa Nemoralis*.) Very succulent and nutritious, early and thriving well under trees and in shade. Admirably suited for pastures, as well as lawns. Lb., 35c; bu. of 14 lbs., \$4.55; 100 lbs., \$30.00.

Various-Leaved Fescue. (*Festuca Heterophylla*.) Valuable for permanent pasture, and is also desirable in lawn mixtures. Lb., 35c; 10 lbs., \$2.90; 50 lbs., \$13.75; 100 lbs., \$27.00.

Lawn Grass. Seed for all purposes will be found listed and priced on pages 108 and 109.

See page 137 for Timothy, pages 138 and 139 for Clovers and pages 140 to 143 for Alfalfa. For Permanent Meadow and Pasture Mixtures, see page 148.

High grade fertilizers will improve your run-down pastures and meadows. We list all kinds on pages 154 and 155.



Cutting Bromus Inermis for Hay and for Seed.

BROMUS INERMIS. (Awnless Brome Grass.)

This is a native of the Russian Steppes and thus is suited to a cold climate and dry soil. It is strongly recommended by the Kansas, Nebraska and North Dakota Experiment Stations. It is good for pasture, and in some places for meadow—where the conditions are favorable. Brome Grass makes a dense growth of leaves which start down close to the ground. Animals like it well for pasture. Sheep and cattle like it the best of any grass.

Brome Grass thickens up rapidly by underground roots or stems. A thin stand thus improves quickly. It forms a dense sod six to eight inches thick, thus binding the soil together and preventing it from being wind blown. It is one of the deepest rooted of cultivated grasses. The stems grow erect, attaining a height of four feet or more.

It is drought defying, frost resisting. Yields enormous crops of splendid hay. It adapts itself to almost every condition of soil and climate and to any use to which grass may be put, equaling in quality and rivaling in yield almost any other grass. The roots push through the soil and form fresh plants on every side. It starts from two to three weeks earlier in the spring than native prairie grass and it keeps green in the autumn longer than any of the useful grasses grown in the West. No amount of cold seems to be able to kill it. It bears up well under hot summer suns. It will grow under conditions that are very dry, and it can also stand being covered with water, not deep of course, for one or two weeks in the early spring. It is an abundant producer of leaves and is much relished as pasture and hay. It is about equally nutritious with Timothy. To the country west of the Minnesota border it is probably the greatest boon that has come to it since buffalo grass began to grow. The worth of this grass to the Dakotas and Minnesota is beyond all estimate.

Culture. It does best on rich soil and lasts longer when Clover or Alfalfa is sown with it. The Clover or Alfalfa will then keep supplying nitrogen to the soil and thus help to nourish the Brome Grass, which would otherwise soon exhaust the soil's nitrogen. If sown with a nurse crop that crop should be sown thinly. 20 pounds of good Bromus Inermis an acre are sufficient. It grows slowly for a time, hence the farmer should not be hasty in concluding that he has failed to get a stand of the grass.

The Nebraska Experiment Station recommends sowing the seed as deep as oats, since shallow seeding often causes failure. If plenty of moisture is present in the soil it should be sown in the fall, otherwise spring is better. It is sometimes sown with winter wheat. In places where it is inadvisable to plow on account of drifting sands, it is well to open the ground with a spade and deposit seed to secure a stand for improving range conditions. It is recommended to sow with Alfalfa where the latter is to be used for pasture. Northrup, King & Co.'s "Sterling" Brand, by express or freight, lb., 20c; 10 lbs., \$1.70; 50 lbs., \$7.75; 100 lbs., \$15.00. Bags free.

CANADIAN BLUE GRASS. (*Poa Compressa*.)

Resembles somewhat the Kentucky Blue Grass, but is shorter and more slender. It is grown very extensively in Canada and some parts of the United States. It will thrive even on hard clay soils, where there is not quite enough lime and fertility for Kentucky Blue Grass. It holds its color and freshness until snow comes. Canadian Blue Grass does not thrive when planted with Clover. Red Top and Orchard Grass are the best for mixing with it to grow on inferior soils. On good land it becomes tall enough for hay and as it shrinks very little in drying, the hay is heavy for its bulk. Grows from one to two feet high. Sow 30 lbs. of seed to the acre. Price, bu. of 14 lbs., \$1.40; 100 lbs., \$9.50.

KENTUCKY BLUE GRASS. (*Poa Pratensis*.)

This makes the best, sweetest and most nutritious pasture for all stock. It is the first to start up in the spring and remains green until snow flies in the fall. It is very hardy and is uninjured by cold or dry weather, hot sun or tramping of hoofs. The roots are so thick and stout that they form a tough sod. Blue Grass requires about two years to get well started and for that reason it is often sown in mixture with other grasses. It will do well on almost any land. Sometimes called "June Grass."

Kentucky Blue Grass does best on well drained, clay soils. It is well adapted to open woodlands. As a pasture it is better liked than any other grass except Bromus or Meadow Fescue. It may continue to improve for ten to fifteen years as the plants spread with their underground root stalks. It is best sown with a mixture of Clover, Timothy, Meadow Fescue and Bromus, which will later be supplanted by the Blue Grass. It is not advisable to turn animals on to a Blue Grass pasture before the grass is strong. During hot weather do not let them graze it very close. Sow 20 to 25 pounds of "Sterling Brand" seed to the acre when sown alone.

We wish to call particular attention to the cleanliness of our Sterling Brand Blue Grass. As usually sold by most seedsmen, Blue Grass weighs 19 to 20 lbs. to the measured bushel. Our Sterling Brand seed is so thoroughly re-cleaned that a measured bushel weighs 28 to 30 lbs. We sell Kentucky Blue Grass at the lawful weight of 14 lbs. to the bushel.

Northrup, King & Co.'s "Sterling" Brand, lb., 25c; bu. of 14 lbs., \$2.40; 100 lbs., \$15.50.

Northland Brand, lb., 20c; bu. of 14 lbs., \$1.80; 100 lbs., \$11.25.
Viking Brand, lb., 15c; bu. of 14 lbs., \$1.65; 100 lbs., \$10.75.



Kentucky Blue Grass.

The prices on all grass and field seeds are subject to market changes. Our latest Red Figure Price List will be sent any time upon request.

RED TOP (SOLID SEED.) (*Agrostis Vulgaris*.)

The place for Red Top is on rather moist soil, deficient in lime and fertility. It will grow where the soil is too poor for Timothy and Kentucky Blue Grass. It is a good variety to sow with Timothy and Clover for meadow or pasture and is more permanent than either of the other two. It should be fed close, as if it is allowed to grow up to seed, the cattle dislike it. On good soil it grows about two feet high; on poor, gravelly land about half that height. It has been grown successfully even on alkali land where other grasses failed. Red Top is commonly known as Herd's Grass and should be more extensively grown, especially in combination with other grasses.

Red Top has interlacing, thick roots which make a firm sward not likely to suffer injury from the hoofs of animals. It stands the effect of drought better than Timothy. It is more permanent if it is grazed off and not allowed to go to seed. For the best quality of hay, it should be cut when in full flower. It is more easily cured than almost any other grass.

As a hay crop, Red Top is next to Timothy in importance among grasses in this country. It grows two feet or more high and yields one to two tons per acre. It increases in thickness for several years after sowing and is one of the most permanent of cultivated grasses. Red Top weighs 14 pounds to the bushel. Only ten pounds of "Sterling" Brand required to the acre.

Northrup, King & Co.'s "Sterling" Brand, lb., 40c; bu. of 14 lbs., \$5.05; 100 lbs., \$35.00, by express or freight.

WESTERN RYE GRASS. (*Agropyrum Tenderum*.)

Sometimes called Slender Wheat Grass, the famous bunch grass of the Canadian Northwest.

It affords excellent pasturage and provides large quantities of hay, but if wanted for hay, should be cut early, as it is relished better by stock. It thrives on all soils, but is peculiarly adapted to prairie soils. It gives good returns on land quite strongly impregnated with alkali and fits it so that grain may be grown successfully.

The seed being quite heavy, may be sown with any ordinary grain seeder. When sown alone as is the common practice, the seed should be put in from 1 to 3 inches deep according to soil and season, 15 pounds to the acre. If with Bromus Inermis, 7½ lbs. of each. Price, by freight or express, lb., 20c; 10 lbs., \$1.80; 100 lbs., \$12.00. Bags free.



Red Top.

MILLET

The varieties of Millet are among the oldest of cultivated grains. A large part of the world's inhabitants subsist upon the different Millets, especially in Africa, Turkey, Persia, India and Japan. However in our country we are chiefly interested in the use of Millet as a stock food.

Millets are especially adapted to regions of light rainfall and hot weather. They are used principally for forage, being very valuable where Timothy is an uncertain crop. The hay is fed most satisfactorily to dairy cows and sheep. In feeding value it ranks well above Timothy.

Culture. Millet does best on rich soils, full of humus, or vegetable matter, where the seed bed is fine and well prepared. It is not suitable for stiff clay or cloddy soils, which would cost too much to prepare for this crop. When sown in hot weather Millet is especially good to subdue weeds.

It is also used as a catch-crop after early grain or a crop which fails. In any case it should never be sown until continued warm weather is certain. None of the small seed varieties should be sown deeper than three-quarters of an inch if the ground is moist. The seed may be sown broadcast or with a narrow tread drill. Sow about 25 lbs. of seed per acre for hay and slightly less than that for seed. Moist clay soil requires more seed than light sandy soils since the seed does not germinate so well. The best seed is produced from Millet sown thinly in drills and cultivated between the rows. Millet should never be sown until the earth is warm in the spring and when continued warm weather is assured.



A
Field of
German Millet.
This Field was Grown
from True Southern Grown
Seed. Note the Heavy Growth.

Cutting for green food may begin as soon as any large number of heads appear and may continue until the crop is ready to make into hay. The best hay is obtained by cutting just as the Millet starts to head nicely, say when one-quarter to one-half the heads are out. If German Millet or other Millets grown for hay are cut too early they lack "body," that is, weight and full feeding value. If cut too late, the stems become woody, the seeds shatter and the hay is sometimes dangerous to feed. If the seeds are ripe it may cause kidney trouble in feeding any animals but sheep. A tedder can be very profitably used in curing the hay. It should be well dried before putting into mow. If allowed to stand in the field cock for sometime, it should be opened up to the sun before hauling into the barn. When Millet is grown for seed, it may be harvested and handled like any grain.

INFORMATION ABOUT THREE LEADING VARIETIES

See Opposite Page for Additional Descriptions.

German Millet.

The stems are single or few in number from each root, they grow large and stout, unbranching. The leaves are rather short, broad and stiff, the heads are often an inch in diameter and 6 to 8 inches long. The seeds are small, of a golden or yellow color. The illustration at the top of this page shows a good stand of German Millet. This will give a very heavy tonnage of first class feed. With thin seeding the stems become coarse and reed-like, therefore we recommend using a liberal quantity of seed.

Hungarian Millet.

This is commonly known as "Hungarian Grass." Each root sends up several slender stems which often branch. The leaves grow upright, rather narrow. Heads are borne erect or nearly so, about four inches long, dark purple in color, bristly and very compact. The seeds are brownish black mixed with yellow. This variety withstands drought remarkably well. If its growth is checked by dry weather the least rain will restore its vigor. It flourishes in light, dry soils but does best in good soils, well manured. This gives a very fine quality of hay on account of its slender, leafy growth.

Japanese Millet.

This has been incorrectly called "Billion Dollar Grass." It is highly recommended for feeding dairy cattle, young stock and sheep. "At the Massachusetts Station Prof. Brooks grew crops in which the plants reached a height of six feet, yielding from twelve to eighteen tons of green forage per acre. Millet forage was much relished by dairy cows; proving superior to flint corn fodder," says Prof. Henry of the Wisconsin Experiment Station in his book, "Feeds and Feeding."

Japanese Millet stools freely and yields enormous crops. Its leafage is heavy and heads very compact. This variety does best on moist, rich low-lands as it does not endure drought well.

Our illustration shows the type of the Japanese Millet head, with its many small branches. The seed is bright gray with a polished appearance when removed from the hulls, which are dark brown and rough.

Sudan Grass.

This grass was introduced by the Department of Agriculture and it has been tested at several experiment stations. Prof. A. C. Army of the Minnesota Experiment Station writes us as follows;

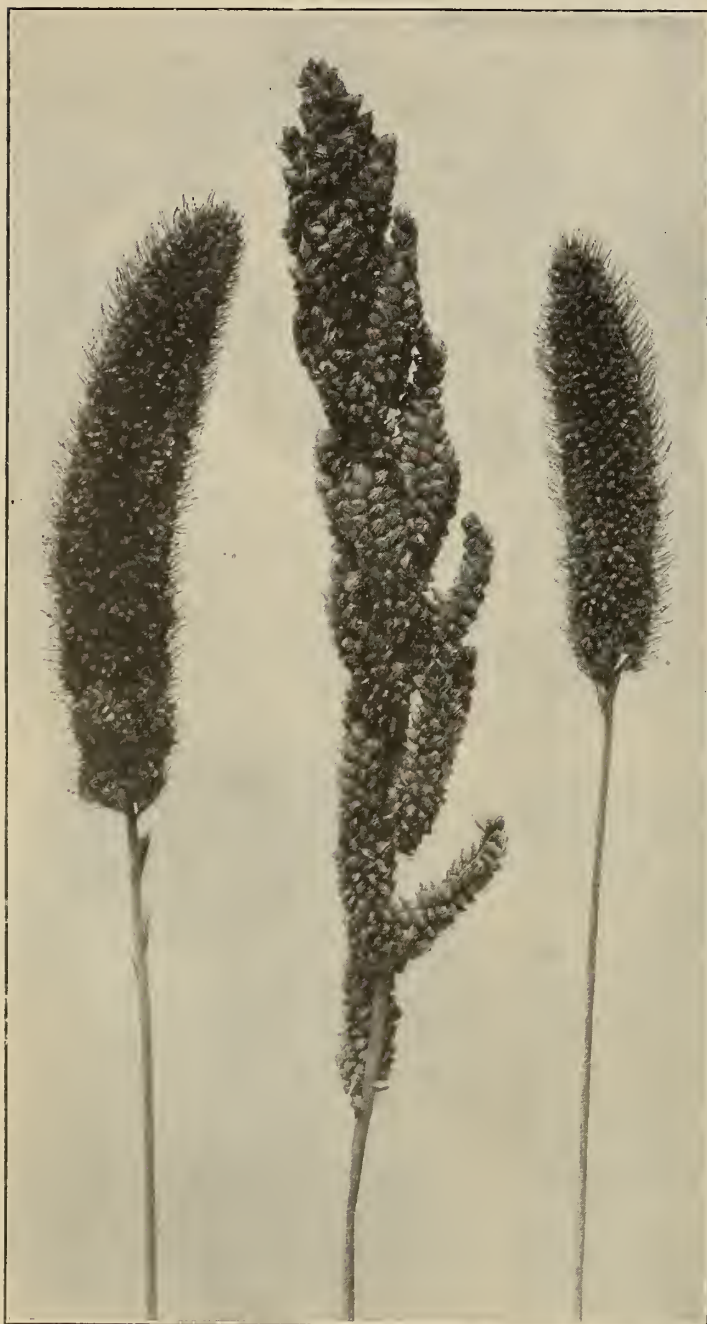
We have experimented with Sudan grass quite extensively for the past two years. As far as I can see at the present time, it looks as though Sudan grass could well take the place of Millet or any other annual hay crop. If sown about May first at the rate of thirty-five to forty pounds per acre, it may be cut some time in July just before heading out. This gives time for a second growth to reach the stage where it can be used for pasture or cut for hay. From the fact that Sudan grass may be used to produce two crops per year from a single seeding, it looks to me as though it should be preferable to Millet.

This does not mean that Sudan Grass will replace Timothy or Clover but will doubtless compete with Millet wherever that is now grown.

Sudan Grass belongs to the Sorghum family. It is an annual, lacking underground root stalks. Two cuttings can be obtained under favorable conditions. The yields vary from 1 to 8 tons of cured hay per acre.

It does best in hot weather and is not suited to high altitudes. Sudan Grass makes heaviest yields on a rich loam, but it has been grown successfully on almost every class of soil from a heavy clay to light sand. The ground should be firm and well drained.

Sow Sudan Grass after the soil has become warm, about corn-planting time. It may be drilled from one-half to one inch deep. For seed production, sow 6 lbs. per acre in rows and cultivate. When broadcast, sow 16 to 24 lbs. per acre. It may be cut with a mower or binder. Price, lb. 40c; 10 lbs., \$3.75; 25 lbs., \$8.75; 50 lbs., \$17.00; 100 lbs., \$33.00; F.O.B. Minneapolis.



Three Desirable Varieties of Millets.
Hungarian, Japanese, Siberian.

MILLET

For Prices on all Millets see our Red Figure Price List which is enclosed in this book. These lists are issued frequently throughout the season as changes in price make it necessary. Sent free upon request.

German Millet. (True Southern Grown Seed.) In the North, Millet is sown almost altogether for hay, and for that purpose Southern grown seed is much the best. It grows taller than does that from Northern seed, and that means more hay. It is finer than that from Northern seed, and that means better hay. In fact, it is our judgment, based on an experience of many years, that a farmer had better, from the stand-point of profit alone, pay \$2.50 a bushel for true Southern grown German Millet than to sow the best Northern Millet as a gift. Millet seed produced in the North, even from Southern seed, becomes what we call Common Millet. Not only does the plant change in character becoming coarser and much more dwarf, but the seed itself shows a change, and is readily distinguished by those experienced in handling it.

We wish to say that any Millet seed offered and shipped by us as German Millet is true Southern Grown Seed, and that only.

German Millet is very sweet, palatable, and when fed to dairy cows produces a large amount of milk. On good rich soil it grows four to five feet high. It is very tender if cut at the right stage, which is when it is in full bloom. About three-fourths of a bushel of seed is sown to the acre. A good yield is from three to five tons of hay to the acre.

For prices on all grades, see our Red Figure Price List.

Common or Northern Millet. As stated before, Common Millet does not yield so much hay nor so good hay as the German (Southern Seed). It is usually much cheaper than true German. Grows usually from two and one-half to four feet high and makes excellent hay. Sow about three-fourths of a bushel to the acre. We have in store this season an especially fine lot of Common Millet which is as nearly perfect in quality as Common Millet can be. This we are offering under our Sterling Brand, (sold only in sealed bags). All grades of Common Millet will be priced on our Red Figure Price List which is issued frequently during the season as changes in prices make it necessary. Sent free upon request.

Hungarian. (Dark Seed.) Often called Hungarian Grass. Many regard this as being better even than German Millet as it is about one week earlier and requires less moisture. The hay is fine and of excellent feeding value.

It is especially valuable on account of requiring such a short season to make a fine crop of most excellent hay. For this reason it is much used as a catch crop. It can be sown as late as the 4th of July with good results, in ordinary seasons. It is much used for following such crops as early potatoes and barley for a crop of hay, thus giving two crops on the same land in one year. Also grown as a green manuring crop to turn under, adding humus or fertility for future crops. Hungarian Millet does not grow so coarse as some



A Plot of German Millet.
Grown from True Southern Grown Seed. Note the Heavy Growth.

other varieties, but still yields quite heavily, from two to four tons of hay to the acre being an ordinary crop. Hay is quite leafy, of very fine quality. For prices see our Red Figure Price List enclosed or a new one will be mailed promptly upon request.

Siberian Millet. A fine variety from Russia, earlier than either German Millet or Hungarian, and consequently very valuable for the North and yields remarkably. It is extremely hardy, withstanding drought wonderfully and is about two weeks earlier than the German Millet. The leaves are very tender, making it excellent for hay. The South Dakota Experiment Station pronounces it "the most promising variety yet tested." The plant stools to a remarkable degree, as many as thirty to forty stalks have been grown from one seed, and is not subject to rust. For prices see our Red Figure Price List enclosed, or a new one will be mailed promptly upon request.

Kursk Millet. This variety was first introduced to the farmers of the United States from Kursk, Russia, in 1898, after which extensive experiments were conducted at both South Dakota Stations, demonstrating the superiority of this new variety. Results since then have been more than gratifying. It ranks very high both as a hay and seed producer, and in dry years the weight and quality of hay have been far superior to other sorts. In favorable seasons, so much difference is not apparent, but it has always been in favor of Kursk Millet. While on moist lands, the German or other southern varieties are recommended, for dry sections we urge the planting of Kursk Millet, knowing that it will produce the results claimed for it. For prices see our Red Figure Price List enclosed, or a new one will be mailed promptly upon request.

Japanese Millet. Improperly called "Billion Dollar Grass." Entirely distinct from all other Millets. It grows from 6 to 9 feet high, stands up remarkably and yields enormous crops. When cured it makes good hay and in quality is superior to corn fodder. It is relished by all kinds of stock. It may be sown broadcast at the rate of 15 lbs. an acre, but it is better to sow in drills 12 to 18 inches apart, using 10 to 12 lbs. to the acre. Cultivate until the plant is 18 inches high, when its rapid growth will smother all weeds. It does best on low, moist ground. For prices see our Red Figure Price List enclosed, or a new one will be mailed promptly upon request.

Hog or Broom Corn Millet. This is grown for the same purpose for which other Millets are sown, but makes inferior hay unless cut very young. It, however, yields enormously of seed, even 60 to 70 bushels to the acre, and this seed is very advantageously used for fattening swine and other stock, and is of special value for this purpose in sections where corn cannot be safely or cheaply grown. Seed also makes very fine feed for poultry and young chicks. It is very similar to the Early Fortune Millet, except that the seed is yellowish-white in color. It will mature in about two months from sowing the seed. For prices see our Red Figure Price List enclosed, or a new one will be mailed promptly upon request.

Early Fortune Millet. A most promising variety, of which astonishing yields are reported. It is very early, and is claimed to be rust proof, and that chinch bugs will not eat the plant. The seed is very beautiful and distinguished in appearance and is of a beautiful red color. The seed is two or three times the size of German Millet. This variety heads in from 25 to 35 days. It gives a large yield both of seed and fodder. It can be fed to horses and other stock without injury, even when cut so late that the seed has formed. The seeds are smooth, the heads are branching, and in other respects this variety is similar to Hog Millet except for the color of the seed. For prices see our Red Figure Price List enclosed, or a new one will be mailed promptly upon request.

See opposite page for further information on Millets.

All Grass and Field Seeds are shipped at purchaser's expense. See page one for general information, suggestions to customers and parcel post rates.

Forage Crops and other Grasses. By Prof. Thomas Shaw. How to cultivate, harvest and use them. Price, \$1.00, (postpaid, \$1.10).
Grasses and How to Grow Them. By Prof. Thomas Shaw. Complete in all particulars. 140 pages. Price, \$1.50, (postpaid, \$1.65).
Soiling Crops and the Silo. By Prof. Thomas Shaw. Illustrated. 364 pages. Price, \$1.50, (postpaid, \$1.65).



Broom Corn and Kursk Millet Seed Heads.



First Cutting of Northrup, King & Co.'s Combination Grass and Clover Mixture.

PERMANENT MEADOW AND PASTURE MIXTURES

We ask purchasers to observe that we are able to offer the following mixtures at reasonable figures, only from the fact that we make up large quantities before the commencement of the season, therefore nothing can be taken out. In all these mixtures we are introducing small quantities of Alfalfa seed with the idea of inoculating the land with the Alfalfa bacillus. Alfalfa revolutionizes farming but the bacillus must be established before the revolution can occur. We cannot afford to add anything to these mixtures on account of the slight margin upon which we have figured. We shall be glad, however, to make estimates upon any special mixtures desired by our patrons. Our recommendation for quantity to the acre is fixed on the basis of good, fair seeding. The quantity can, of course, be spread over more or less ground as the case may demand. 25 lbs. supplied at the 100 lb. rate.

These are mixtures we can "stand by." We can make up lower priced mixtures if desired but the cost of the seed is so small, compared with the value of a good meadow, that it would not usually pay to plant anything but the best mixture obtainable.

Mixtures for Permanent Meadows.

No. 1. For dry and high land. Contains Red Top, Medium Red, Mammoth Red and Alsike Clovers, Alfalfa, Timothy, Orchard Grass, Perennial Rye Grass, Tall Meadow Oat Grass, Meadow Fescue, Hard Fescue, Canada Blue Grass, Kentucky Blue Grass and Slender Wheat Grass. Sow 20 to 30 lbs. to the acre. Per 100 lbs., \$15.00.

No. 2. For good land neither too wet nor too dry. Contains Orchard Grass, Medium Red and Alsike Clovers, Timothy, Meadow Fescue, Perennial Rye Grass, Hard Fescue, Sheep's Fescue, Alfalfa, Kentucky Blue Grass and Red Top. Sow 20 to 25 lbs. to the acre. Per 100 lbs., \$14.75.

No. 3. For moist and wet land. Contains Red Top, Timothy, Alsike and Medium Red Clover and Tall Fescue. Sow 20 to 25 lbs. to the acre. Per 100 lbs., \$20.00.

Mixtures for Permanent Pastures.

No. 4. For good high and dry land. Contains Tall Meadow Oat Grass, Orchard Grass, Hard Fescue, Sheep's Fescue, Timothy, Perennial Rye Grass, Medium Red, Mammoth Red and White Clover, Kentucky Blue Grass, Canadian Blue Grass, Meadow Fescue and Alfalfa. Sow 25 to 35 lbs. per acre. Per 100 lbs., \$16.75.

No. 5. For good land neither too wet nor too dry. Contains Tall Meadow Oat Grass, Orchard Grass, Sheep's Fescue, Timothy, Perennial Rye Grass, Red, Alsike and White Clover, Alfalfa, Kentucky Blue Grass and Red Top. Sow 25 to 35 lbs. per acre. Per 100 lbs., \$16.00.

No. 6. Especially for prairie conditions. Contains Slender Wheat Grass, Canada Blue Grass, Kentucky Blue Grass, Red, White and Alsike Clover, Alfalfa and Bromus Inermis. 30 to 40 lbs. per acre. Per 100 lbs., \$18.00.

Descriptions of each variety of grass mentioned above will be found on pages 137, 144 and 145.

Awarded a \$150.00 Prize.

I believe I owe to Northrup, King & Co. the awarding of the \$150.00 prize in this district, given by Mr. James J. Hill for the best managed farm in the Dakotas and Minnesota in 1906. The deciding point in Prof. Shaw's mind, the judge who passed upon the merits of each farm, was the fine pasture on this farm. There were a number of farms entered in the competition with finer buildings and better stocked and fenced, but in the six years which I had been here I had used nothing but Northrup, King & Co.'s seed, and had just put in a permanent pasture the spring before the judges came. In the fall each of the eight kinds of seed showed a luxuriant growth and were easily identified in the stubble. As I expected my seeds to return to me a thousand fold I thought it folly to stop at first cost in obtaining the best.

G. F. MOORE, Inwood Stock Farm, Worthington, Minn.

Northrup, King & Co.'s

Combination Grass and Clover Mixture.

For Both Hay and Permanent Pasture



(Sold only in sealed bags.) It affords enormous crops of hay of the finest quality and highest feeding value, and after same is cut, continuous and abundant pasturage of the richest and most nutritious character until winter sets in. It will stand for years and may be used either for pasturage exclusively or hay and pasturage, as varying conditions may suggest.

We stake our reputation on this mixture, not only as to the purity and germination of the seeds used, but as to the satisfaction it will give to those who purchase.

Contains Mammoth Red, Medium Red, Alsike and White Clover, Alfalfa, Timothy, Kentucky Blue Grass, Meadow Fescue and Perennial Rye Grass.

Owing to the deep rooting and spreading character of many of the varieties employed, fields sown with this mixture, will, during periods of drought, look fresh and green while other meadows and pastures are dry and burned. Price, 100 lbs., \$12.75. Bags free. 25 lbs. supplied at the 100 lb. rate.

Quantity—We recommend at least 40 lbs. to the acre.

Brush Pasture Mixture.

The modern farmer and stockman does not dig grubs and stumps from brush lands, the expense of muscle and money is too great to warrant the cost. After the wood from such lands has been cut and sold, he seeds the field to tame grasses and Clovers which soon take possession of the soil, when it is pastured with sheep, horses and other stock. During the time of pasturing the roots and stumps will decay and thus the brush lands are made profitable from the beginning at very low cost.

Brush Pasture Mixture contains a variety of seeds such as Blue Grass, Red Top, Alsike, Red and Alfalfa seed, etc., which will thrive on cut-over lands. The introduction of a small quantity of Alfalfa seed in this mixture is a particularly good feature as it establishes the Alfalfa bacteria in the soil, preparing it as Alfalfa land when it is ready for cropping. Indeed, we are now putting small quantities of Alfalfa in all our Farm Grass Mixtures, with this purpose in view. It is the approved way of establishing the Alfalfa bacillus. This is a valuable and practical addition to our list of mixed grasses. If there is considerable brush on the land cut in July or August. Then sow the seed as freely as seems desirable. It may be mentioned that brush cut at that time rarely grows again. Price, 100 lbs., \$13.25. Bags free.

Bottom Land Grass Seed Mixture.

Since the advent of county ditches, drainage canals and government projects for the reclaiming of thousands of acres of swamp land throughout our country, there has been a great demand for a grass seed mixture which will thrive on this class of soil. We recommend this mixture with full assurance that it will give satisfaction. Our trials have demonstrated this beyond a doubt. There is no tame grass which will grow in standing water, but on moist bottom lands good results will be obtained. Note the low price. Price 100 lbs., \$11.50. Bags free.

Owing to large crops and consequently lower values on some of the varieties of grasses in these mixtures, we are able to make very much lower prices than for several years. At the same time some of these grasses, like Red Top, are scarce and high. We hope this will encourage the seeding of large areas.

INSECTICIDES AND REMEDIES FOR FUNGUS

None of the poisonous preparations listed below can be sent by parcel post. For postage on other items, add at the rates on page one.

Arsenate of Lead. A good liquid insecticide for all leaf eating insects. Especially adapted for use on tender plants and foliage. Arsenate of Lead remains on the leaf longer than most insecticides, and so does not have to be applied so frequently. Then again, it is particularly good for extremely delicate foliage as it positively will not burn. Use in proportions of 2 to 3 pounds Arsenate of Lead to 50 gallons of water, or two to four pounds of Lead to 100 gallons of water if a weaker solution is desired. You can judge best of the strength to be used by your local conditions. Price, 1 lb. can, 25c; 5 lb. can \$1.00; 10 lbs., \$1.75; 25 lbs., \$3.75.

Bordeaux Mixture. Prevents Blight, Rot, Mildew, Specks and Spots. Increases Crop Yield 15 to 25 per cent. Ready for use. One gallon makes 50 gallons Spraying Compound by simply adding 49 gallons of water and stirring.

There is no question about the profit in spraying fruits and vegetables. Sprayed crops produce more. Sprayed fruit and vegetables sell for very much higher prices. You may have poor crops and not know the reason. Possibly you didn't know that blight causes the rot on tomatoes. Your melon or cucumber patch may have withered up in twenty-four hours without your understanding the cause.

A magnificent field of potatoes today may tomorrow be a burned up, shriveled up disappointment, owing to the blight.

Prices, qt., 40c; gallon, \$1.00; 5 gallons, \$4.50.



Bug Death. A fine non-poisonous powder and in composition is peculiar to itself, inasmuch as it does not depend upon arsenic for its killing power. BUG DEATH is not a new and untried preparation. It has been on the market fifteen years, and its sales have shown a large increase each year. BUG DEATH is safe and sure to use on potatoes, tomatoes, currants, gooseberries, cucumbers, melons, egg plants, and garden truck generally. (Full directions on each package.) Practical tests have always shown that the increased yield more than paid the entire expense. BUG DEATH prevents blight, increases yield and improves quality. It can be used dry or in a spray. Apply at the rate of about 12 lbs. per acre. Prices, 1 lb. package, 15c; 3 lb. package, 35c; 5 lb. package, 50c; 12 1/2 lb. package, \$1.00; 100 lb. keg, \$7.50, by express or freight at purchaser's expense.

Dicky Duster. A convenient implement for applying Bug Death and other powders to plants. Each, 25c, by express or freight.

Conkey's Fly Knocker. An instant relief from the attacks of flies and other troublesome insects on horses and cattle. Flies not only carry disease germs from one animal to others, but sometimes drive cows and horses into a frenzy by their incessant attacks. Fly Knocker will drive pests away from the barn or other places where it is used. It may be applied very easily and at small expense by using the Excelsior Single Tube Sprayer. One ounce of liquid will spray two animals. Price, 1 quart, 35c; 2 quarts, 60c; 1 gallon, \$1.00. Express or freight charges to be paid by purchaser.

Cutworm Food. Drop a teaspoonful of this around each plant the day it is set out, or on each hill as the seedlings break through. The worm then eats the poison and not the plant. One pound will protect about 75 plants. Cutworms work at night, usually cutting off the plant stem at the surface of the ground. They are dark colored, round caterpillars which hide in the soil in the daytime. Price, lb., 25c; 5 lbs., \$1.00; 10 lbs., \$1.50.

Fir Tree Oil Soap. A popular insecticide for use on trees and plants, both in the house and garden. Properly applied it is sure death to mealy bug, red spider, black and green aphids, caterpillars, worms, scale, thrip, blight and slugs. It is also valuable as a remedy for skin disease on animals and for destroying fleas and other insects. This soap is a saponification of Fir Tree Oil with other ingredients prepared in a special way, which produces a more effective and much cheaper article than the simple oil. One ounce makes one gallon of liquid; a 25c can makes eight gallons. Price, 1/2 lb. can, 25c; 2 lb. can, 75c.

Fish Oil Soap. This is a caustic Potash Soap made from pure fish oil and is free from animal fat or other adulteration. Makes an excellent wash for trees and plants where insects and eggs affect the bark, including the San Jose Scale; also used for smearing on trees to prevent worms crawling up. Lb., 15c.

Formaldehyde. The loss to the farmers of the United States from smut and other fungous diseases of wheat, barley, oats and other grains amounts to millions of dollars every year. The spores or seed of the fungus are on the seed grain which you plant; when the grain sprouts and grows the fungus grows too; it follows up through the stalk into the blade and into the ear, and the result is blighted plant, smut grains and a diseased yield of inferior quality. The same holds true of Scab which has proved such a blight to the Irish potato crop.

Can you afford to use it? The price of a bushel of wheat expended for Formaldehyde will add several bushels to the next harvest. It takes as much land and labor to raise a light crop as a heavy one. Think it over. Sold only in original sealed bottles, pt., 35c; qt., 60c; gal., \$2.00; 5 gal., \$9.00. Directions for use are found in our booklet, "Insects and Diseases," which is sent free on request.

Grafting Wax. It is important that the wax should not soften and run after having been applied to the graft. Ours is made with this particular feature in view. It will not soften in the sun so as to run. It is, however, easily worked with the hand when being applied. If used in very cool weather, it may be more quickly softened by holding it over the stove for a few moments. Besides its use for grafting, it is excellent if applied to young trees and shrubs if barked, and will remain on and prevent rot until the wound is covered with new bark. 1 lb., 35c; 1/2 lb., 20c; 1/4 lb., 12c. Mailing weight, 10 pc. over net weight.

Grape Dust. A powdered fungicide very efficient in destroying mildews and preventing blight. Price, 1 lb. carton, 15c; by mail, 30c; 5 lbs., 35c; 10 lbs., 65c.

Hellebore. Pure Powdered White Hellebore is one of the best insecticides for general use on plants and vegetable foliage. Destroys insects that eat the leaves and flowers, such as Slugs, Caterpillars, Currant Worms, Cutworms, and if mixed with bran, Rose Bugs, and, in fact, most all the eating insects that pester the gardener and grower of plants. When used with water, 1 oz. to 2 gal. is the usual proportion. If used dry apply by dusting. Price, 1/4 lb., 10c; 1/2 lb., 15c; 1 lb., 25c.

Kerosene Emulsion. A safe and sure remedy for all Lice and Flies that infest plants and trees at times. It will destroy the Mealy Bug, Squash Bug, Oyster Shell Scale and all insects that take their nourishment through a proboscis. It is put up in a concentrated form, and dilutes with water from 10 to 30 times its bulk, according to the amount of insects on the plant. It is also used on the San Jose Scale a great deal when it is in the early stages. Apply with a vaporizer or with a pump the same as our other remedies. For plum curculio, spray just before the blossom buds open, and the second time two weeks after the petals fall. Adding a little Paris Green at this time will kill the leaf lice, aphides, bugs and other insects injurious to fruit and foliage. Spray the third time, about June 10th, with the plain Emulsion. Woolly Aphis of the apple.—Same treatment as for the Plum Curculio. Quart, 40c; by express or freight only at purchaser's expense.

Lemon Oil Co.'s Insecticide. Destroys mealy bug, scale, thrip, red spider, etc. One of the best known insecticides, cheap, safe and effectual. It can be applied as a spray or as a wash and has a pleasant odor. Highly recommended for house plants, palms, etc. Dilute with water 30 to 50 parts. 1/2 pint, (mailing weight, 12 oz.) 25c; pint, 40c, (mailing weight, 1 1/4 lbs.)

Lime-Sulphur Solution. A concentrated solution for the control of San Jose Scale, other scales and all sucking insects. It also checks most fungous diseases. For scale insects on trees, plants or shrubs, apply in the fall or winter at the rate of one gallon of Lime-Sulphur to twelve gallons of water. For summer spraying on fruits and vegetables use one gallon solution to 40 gallons of water to control rust, scab and rot. Price, qt., 40c; gal., \$1.00; 5 gal., \$4.50.

Nico-fume Liquid. An effective remedy for green aphid and other insects which infest Roses, Sweet Peas and other plants. For spraying or fumigating. Contains 40 per cent nicotine. Price, 1/4 lb., 50c; lb., \$1.50; by express or freight.

Paris Green. For all leaf eating insects. The standard, arsenical poison killing all leaf eating insects, worms, slugs etc. Cheaper than arsenate of lead but does not stick to the foliage so long. There is also danger of burning leaves if Paris Green is used too strong. For potatoes apply at the rate of 1 lb. to 50 gallons of water, for plants with more tender foliage it should be diluted more. Paris Green is also commonly used as a dry spray and mixed with lime or any other available powder for this purpose.

To kill cut worms, sprinkle Paris Green on small lots of fresh cut grass, or balls made of bran sweetened with molasses. Place this poisoned grass or bran near the plants where cutworms are working.

In using Paris Green it is essential that you use a brand of standard strength and purity so that it can be depended upon for uniform results. This sort is very reliable. Price, 1/4 lb., 10c; 1/2 lb., 15c; 1 lb., 25c.



1 LB. PACKAGE

Slug Shot. A non-poisonous powder and very popular insecticide. It requires no further mixing or preparation, easily applied and not injurious or dangerous to animals, the person applying it, or fruits or vegetables treated. Destroys potato bugs, beetles, green and black fly, slugs, caterpillars, worms, etc. Very effective for cabbage lice and worms. Price, 1 lb. carton, 15c; (by mail, 30c); 5 lbs., 35c; 10 lbs., 65c.

Sterlingworth Sulphur Candles. These candles are packed in flat tin boxes, each one having a large round wick in the center, which stays lighted until every particle of sulphur is consumed. The tin permits its being set in a dish of water and as the tin is heated by the burning sulphur, the water throws off a steam which unites with the sulphur fumes, making them far more deadly than the ordinary sulphur would be.

The candle weighs seven ounces; safe to use and easy to light. They produce a deadly vapor fatal to insect life and disease germs. This candle will thoroughly fumigate a room 12 by 15 feet. By express or freight each, 12c. Mailing weight, 7 oz.

Sulpho-Tobacco Soap. A wonderful insect pest exterminator. Unsurpassed for quickly exterminating all insect life on plants and flowers in and out of doors. Excellent for rose bushes, shrubs, etc. This popular insecticide never fails to give satisfaction and is cheap, effective, clean, harmless and noninjurious to the tenderest growth. For domestic purposes it rids the house of cockroaches and is a superior wash for dogs and all other animals. A trial will give highly gratifying results. 3 oz. cake sufficient for 1 1/2 gallons prepared solution, 10c; mailed postpaid, 14c; 8 oz. cake, sufficient for four gallons prepared solution, 20c; mailing weight, 10 oz. Free with order we will, if asked for, enclose a booklet, "The Window Garden."

Tobacco Dust. For green and black aphids, fleas, beetles, etc. Splendid fertilizer and preventive for insects in the ground and around roots. Price, lb., 10c; 5 lbs., 25c; 10 lbs., 40c; 25 lbs., 75c; 50 lbs., \$1.35; 100 lbs., \$2.50.

Tobacco Extract. Liquid, free from gum. Destroys plant lice of all kinds, red spiders, sheep ticks, etc. For syringing, dilute 20 times or more with water. The finer the spray, the better. 1/2 pt., 40c, pt., 70c.

Tobacco Stems. For fumigating greenhouses and conservatories for the destruction of green and black aphids and other insects. Packed in cases containing 200 to 300 lbs. Each, \$3.00.



LIQUID and DUST SPRAYERS.

Timely spraying will save your fruits, vegetables and flowers.

Spraying Suggestions.

For sucking insects that live on plant juices—such as scales, lice and aphids, use Fir Tree Oil Soap, Fish Oil Soap, Kerosene Emulsion, Lemon Oil Co's Insecticide, Lime-Sulphur Solution, Nicot-Fume Liquid, Sulpho-Tobacco Soap or Tobacco Extract. See page 149 for particular information on each. To kill chewing insects that eat the leaves or fruit—for example, currant worms, canker worms, apple worms (coddling moth) and cabbage worms, apply Arsenate of Lead, Bug Death, Hellebore, Paris Green or Slug Shot. For Cutworms use Cutworm Food or Paris Green. For blight and diseases use Bordeaux Mixture, Formaldehyde, Grape Dust or Lime-Sulphur. See page 149.

Auto-Spray No. 1.

A compressed air sprayer warranted against mechanical defect and guaranteed satisfactory. We have offered this sprayer for many years and with increasing success. We find the machine thoroughly dependable. Compressed air sprayers far excel the old style bucket or knap-sack devices and combine every point of excellence in a spray machine. The sprayer is first loaded two-thirds full of solution and air is then compressed in the remaining third. The compression of the air forces out the solution in the form of a fine mist or spray. It is perfectly simple and thoroughly durable. A few strokes of the plunger will operate the machine for several minutes.

Uses—It is used for spraying trees and plants, green houses, poultry houses, washing windows or wagons, as a fire extinguisher, for spraying cattle to keep off flies, for spraying lawns to eradicate dandelions, in fact for every spray purpose. Three lengths of extension are recommended for tree work. The Auto-Spray No. 1 is used by nearly, if not all, the state experiment stations, and by the United States Government, and it is used and recommended by thousands upon thousands of agriculturists and horticulturists throughout the world.

Styles—The Auto-Spray is built in four styles, as priced below. We recommend the Brass Auto-Spray No. 1-B, because it will resist the action of all spray solutions, and the Auto-Pop with nozzle cleaner, is the only self cleaning device on the market. Shipping weight, 15½ pounds.

Prices—Our prices on all sprayers include packing and delivery to express or freight office at Minneapolis, purchaser to pay transportation. Where seeds are to be sent at the same time, a sprayer can be put in without any appreciable extra charge for transportation. With every sprayer is furnished complete instructions for use and formulas for emulsions, disinfectants, etc., the materials for which can be obtained cheaply at any drug store.

Auto-Spray No. 1-A, Brass Tank with Stop Cock.....	\$6.75
Auto-Spray No. 1-B, Brass Tank with Auto-Pop (recommended).....	7.20
Auto-Spray No. 1-C, Galvanized Tank with Stop-Cock.....	4.50
Auto-Spray No. 1-D, Galvanized Tank with Auto-Pop.....	4.95
Auto-Pop No. 1 is a patented shut off device with self-cleaning attachment. Operating the lever opens or closes the valve and cleans the nozzle aperture automatically. Supplied separately.....	\$1.25
Brass 2 ft. Extension, each.....	.50
Brass Elbow Extension, each.....	.50
Two Row Attachment.....	1.50
Strainer, for Auto-Spray, No. 1. Solid Brass.....	1.00

DRY SPRAYERS.



Leggett's Champion Duster.



Leggett's Champion Duster.

Distributes Paris Green, Hellebore, Sulphur, Etc. Dispenses with all bother and labor of using water. For Farm, Garden, Vineyard, Tobacco Fields, Etc.

This implement has proved itself "Champion," being far ahead of any other machine in its capacity to distribute a uniform and almost imperceptible quantity of Paris Green, or other powder, doing effective work without injuring the foliage when used properly. The dry method is rapidly superseding liquid sprays.

Will do as much work in a day as a horse-power sprayer.

Will green two rows of potatoes at once as fast as a man walks.

Adjustable to any width of row. Length of machine is such that the poison is kept at a safe distance from the operator.

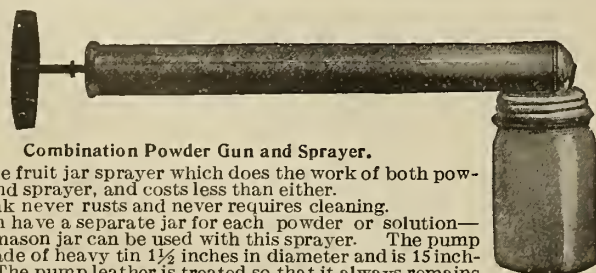
Any one can use it. Will not get out of order and will last for years. Machine weighs about six pounds. Without tubes it is 27 inches long. Each machine includes four sixteen inch tubes, six nozzles and two straps. Weight cased, 17 lbs. The reservoir holds over a quart of powder, equal to about 4 lbs. of Paris Green.

Price, \$8.00; by express or freight at purchaser's expense.

Little Giant Duster.

Distributes any dry powder, Paris Green, etc., to perfection. Save yourself all the bother and labor connected with liquid sprays, and at the same time accomplish more effective work by using the dry powder. This method has long ago passed the experimental stage, and highest authorities sanction it. This machine keeps the poison at a safe distance from the operator. Dust potato vines as fast as you walk, two rows at a time. Reservoir holds nearly a quart of powder. Machine weighs 6 lbs. One packed in a case complete, three tubes, five nozzles and strap. Cased for shipping weighs 15 lbs. Price, \$6.00; by express or freight at purchaser's expense.

Simplex Glass Jar Sprayer.



Combination Powder Gun and Sprayer.

A simple fruit jar sprayer which does the work of both powder gun and sprayer, and costs less than either.

The tank never rusts and never requires cleaning.

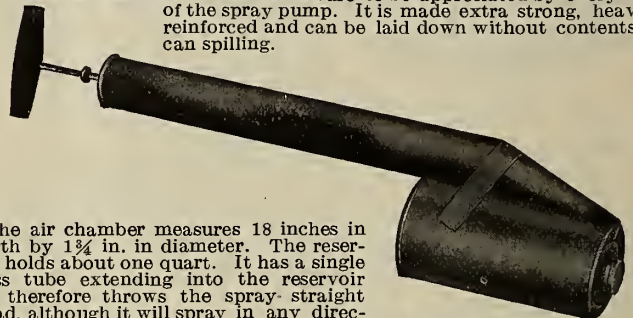
You can have a separate jar for each powder or solution—any pint mason jar can be used with this sprayer. The pump tube is made of heavy tin 1½ inches in diameter and is 15 inches long. The pump leather is treated so that it always remains soft and pliable—is always ready for use. All sprayers are securely packed. They blow and spray in any position, up or down.

You can blow insect powder, Hellebore or Bordeaux mixture and spray Arsenate of Lead, Paris Green or other solution with this sprayer.

Price, 50c by express or freight.

Excelsior Single Tube Sprayer.

Sprays in any Direction. An invaluable feature and one that is sure to be appreciated by every user of the spray pump. It is made extra strong, heavily reinforced and can be laid down without contents of can spilling.



The air chamber measures 18 inches in length by 1½ in. in diameter. The reservoir holds about one quart. It has a single brass tube extending into the reservoir and therefore throws the spray straight ahead, although it will spray in any direction desired. Especially adapted for use in the poultry house, in the garden and orchard and on the farm. Price, 50c. Mailing weight 1 lb.

"Clipper" Bean and Pea Picking and Sorting Table.

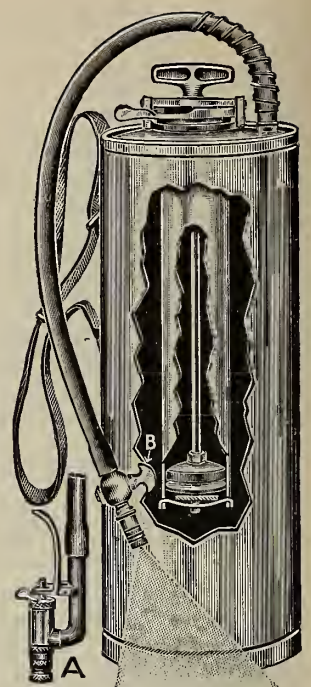
This is a money saver to any grower who raises Peas or Beans. The work of separating poor from good seed can be done very accurately with greater speed and less expense than by any other method. The price one may secure on the market for Beans or Peas is largely increased when the stock offered for sale has been thoroughly hand-picked and is usually greater in proportion than the cost of hand-picking the seed.

From the illustration its ease of operation is readily apparent. The canvas belt over which the Peas or Beans flow is operated by a foot treadle and may be run at a speed to suit the operator. This also works an agitator which feeds the Peas or Beans on the belt in the proper quantity. As the seed passes towards the operator, who remains seated during the work, the discolored, broken or otherwise unsuitable seeds may be quickly and easily removed and placed in the receptacles on either side of the belt. The good Peas or Beans drop into a spout and run into a sack which may be placed at the front of the machine. The hopper is large and will hold approximately a bushel of seed.

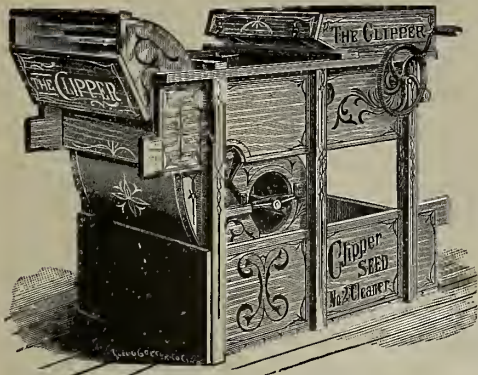
We consider this picking table the most satisfactory on the market. There are thousands in use throughout the country; not only by the small grower or farmer, but by the large seed growing establishments. Its cost will be saved by hand-picking a very few bushels of Peas or Beans. There is nothing to get out of order or wear out, except the canvas belt which may be replaced at a trifling expense. Our price with large hopper is \$8.00, f. o. b. Minneapolis.



The "Clipper" Foot-Tread Pea and Bean Picking and Sorting Table.



Auto Spray No. 1.



"Clipper" Grain and Seed Cleaner is good enough for us. Why? Because it is the Best Cleaner Made.

For a quarter of a century we have used "Clipper" Grain and Seed Cleaners in our warehouse and they have played an important part in sustaining and enhancing the reputation of Northrup, King & Co. for selling clean and perfect seeds.

We have tested every Fanning Mill on the market, and find the "Clipper" excels them all. In our business, "clean seed" is a vital question. If the "Clipper" cost ten times what it does we would rather pay the price than use a machine of some other make.

These are strong statements, but we cannot say less and do justice to the "Clipper."

How the "Clipper" Eradicates Weeds.

One reason your fields choke up with weeds is because you sow them with your seed! The way to get rid of the weeds is to clean your seed with the "Clipper" before sowing. It will take out weed seeds, light, dead seed or grain, and insure an even stand of strong, healthy plants, increasing the yield an acre, and the grade as well. That means more profit and a larger bank account, at the end of each season.

Exclusive Features.

Among the exclusive features of the "Clipper" we call especial attention to the following:

The screens are so arranged as to be in plain view and of easy access to the operator while the machine is in operation.

Vertical air shaft, through which the draft passes upward, carrying chaff, dust, etc., through dust hood, another "Clipper" device. This is the only mill having a vertical blast.

The perfect grain or seeds fall and pass into the grain box, which holds five bushels.

The grain box has a lifting board at the end, which allows the contents to be easily scooped into sacks. This grain box is highly important, as it prevents waste, makes sweeping floors unnecessary, and is just the place to store the screens and all detached parts when not in use. The steel shafting of the fan has a cone pulley, which enables you to change the speed of the fan to suit the varying weights of grains and seed.

To anyone desirous of obtaining a first-class, inexpensive and durable mill, for general use, the above facts should dictate the purchase of the "Clipper."

The No. 1 B Clipper Cleaner is the best all-round farm mill made. Give it a trial and you will use no other. Endorsed and used by State and Government Experiment Stations.

Important Announcement.

We have arranged with the manufacturers for the exclusive sale of the "Clipper" Grain and Seed Cleaner, in the states of Minnesota, North Dakota, South Dakota, Iowa, Montana and Northern Michigan.

This arrangement permits us to sell the No. 1 B "Clipper" for only \$21.50 f. o. b. Minneapolis. Shipping weight, 185 lbs. Full directions for operating sent with every cleaner.

The No. 2 "Clipper" is a hand power cleaner of large capacity. It is designed especially for cleaning all kinds of fine seeds, such as clover, timothy, alfalfa, millet, flax, red top, blue grass, etc. This size will do any work that can be done on a No. 1 B, but it is not recommended as a grain cleaner if it is to be operated by hand, as more power is required than on grass seeds. We can furnish a power pulley, however, without extra charge. Ten seed screens are furnished with this mill. A set of four grain screens can be supplied for \$5.00 extra. Our price, \$32.50 f. o. b. Minneapolis.

What the "Clipper" Will Do.

The "Clipper" will clean all classes of grain and seeds, such as wheat, corn, oats, barley, rye, beans, peas, buckwheat, kaffir corn, cane seed, millet, clover, alfalfa, timothy, mustard, flax, etc., and is suitable for farm or general use. Unlike other mills, the "Clipper" cleans all classes of seeds and grains in one operation. Effectual separation of plantain from clover seed is accomplished, removing imperfect and foreign seed, as well as cleaning the perfect seed, and any other separation that from its nature is not impossible. It is the best hand mill made for grading seed corn.

The new, improved No. 1 B "Clipper Mill" embodies many new features, includes a revision and addition to the screen assortment making it suitable for practically all kinds of work.

A Fourfold Guarantee.

Every "Clipper Mill" is guaranteed, both as to material and workmanship, and is also guaranteed to excel all other seed and grain cleaners on the market.

It is guaranteed by the manufacturers and that guarantee is reinforced by our guarantee.

Every farmer ought to own a "Clipper Mill." It will pay for itself over and over again by the increase in crop yields and improvement in quality. One day's trial is enough to convince anyone of its superior merits. If more information is desired we will mail "Clipper Leaflet" free, on request.

Unusual Capacity.

The "Clipper" will handle seed wheat at the rate of 20 bushels an hour and clover seed at the rate of 10 bushels an hour. No other Fanning Mill on the market will dispose of grain and seed so rapidly and well.

When you buy a "Clipper" you get necessary attachments without extra charge, including two wire and ten perforated zinc screens, equipped with separating boards.

A Good Seed Cleaner.

The Clipper Mill I bought of you last year is surely a good seed cleaner.
WM. H. REES, Stranburg, S. D.

Well Pleased.

I am well pleased with the Clipper Grain and Seed Cleaner—does fine work.
L. G. COONEY, Fredricksburg, Ia.

PLANET JR. FARM AND GARDEN TOOLS

NO BETTER GARDEN TOOLS IN THE WORLD. OUR PRICES AS LOW AS ANY.

Fully illustrated Catalogue of Planet Jr. Garden Tools mailed free on request.

No other cultivating machine is so widely known as the Planet Jr. Combined Horse Hoe and Cultivator, for it is in use throughout the civilized world. It is so strongly built as to withstand incredible strain, yet it is light and easy to handle. It opens and closes furrows, hoes right up to the plants without danger of injuring, throws dirt to or from the row, and throws back from centre again. You can cultivate to any depth desired, and adjust for any width. Every part is perfected to make the tool acceptable to the intelligent farmer who knows the best is always the cheapest.

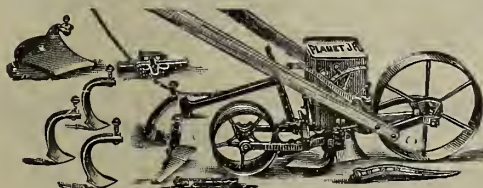
Seeders and wheel hoes are not used as extensively as they should be. Every person with a garden twenty-five feet square, or larger, should use Planet Jr. Implements to get the best and biggest crops. The time and labor saved the first season will pay for the tools.

Great saving comes from the accuracy with which good hand tools do

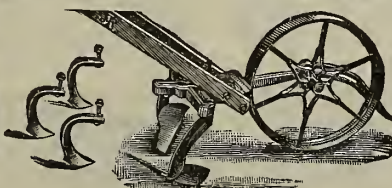
their work. The regularity with which seed can be dropped and the consequent regularity in growth are astonishing to those who have not used good seeders; and it is the same way in cultivation, wheel hoes generally do the work of five or six men with hand hoes and often do it better.

Perfection in seeding makes a saving of seed while producing a more regular crop; and planting in a straight narrow line, makes another saving in the hoeing, cultivation and thinning. To make any crop a complete success it is essential that it shall be regular; missed places and uneven thickness reduce the result materially; be sure, therefore, to use a first-class seeder.

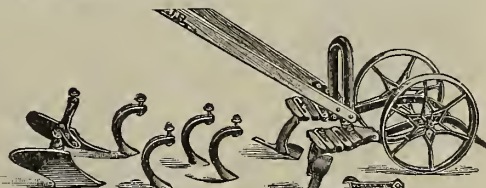
Plants when grown at regular and suitable distances apart do their best, and this fact, generally not sufficiently considered, makes a hill dropping seeder a necessity; for a regular stand can be obtained far more easily by dropping the seeds in hills and then thinning out, than in any other way.



No. 4, Hill and Drill Seeder and Single Wheel Hoe.



No. 17 1/2, Single Wheel Hoe.

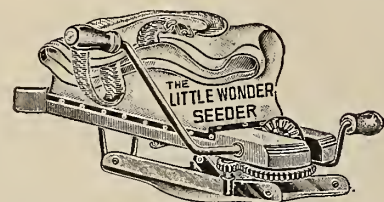


No. 6, Double Wheel Hoe, complete.

	Our Price.		Our Price.
No. 28, Hill and Drill Seeder, Single Wheel Hoe and Cultivator.....	\$14.50	No. 16, Single Wheel Hoe.....	\$ 5.35
No. 29, Hill and Drill Seeder, plain, (as a seeder only).....	11.00	No. 17, Single Wheel Hoe.....	4.50
No. 30, Single Wheel Hoe, Cultivator, Plow and Rake.....	7.50	No. 17 1/2, Single Wheel Hoe.....	4.00
No. 4, Hill and Drill Seeder, and Single Wheel Hoe.....	10.50	No. 18, Single Wheel Hoe.....	3.00
No. 4, Hill and Drill Seeder, plain, (as a seeder only).....	8.50	No. 38, Single Wheel Disc Hoe, complete.....	6.50
No. 25, Hill and Drill Seeder, and Double Wheel Hoe.....	13.00	No. 18 1/2, Single Wheel Disc Hoe, plain.....	4.25
No. 6, Hill and Drill Seeder and Single Wheel Hoe.....	13.00	Firefly Garden Plow.....	2.25
No. 6, Hill and Drill Seeder, plain, (as a seeder only).....	10.50	No. 19, Single Wheel Hoe.....	3.25
No. 36, Single Wheel Hoe.....	5.75	No. 8, Horse Hoe and Cultivator with steel wheel.....	8.75
No. 3, Hill and Drill Seeder.....	10.00	No. 7, Horse Hoe and Cultivator, complete, with steel wheel.....	8.25
No. 5, Hill and Drill Seeder.....	12.50	No. 9, Horse Hoe and Cultivator, with steel wheel.....	7.50
No. 1, Combined Drill Seeder and Wheel Hoe.....	9.00	No. 9, Horse Hoe and Cultivator, without wheel.....	6.50
No. 11, Double Wheel Hoe.....	8.50	No. 9, Cultivator with steel wheel.....	6.25
No. 12, Double Wheel Hoe.....	6.50	No. 81, Horse Hoe, Cultivator and Hiller, complete, with steel wheel.....	9.75
No. 13, Double Wheel Hoe.....	4.25	Twelve Tooth Harrow, complete, with steel wheel.....	8.75
No. 14, Double Wheel Disc Hoe, complete.....	7.50	Twelve Tooth Harrow, without pulverizer or wheel.....	5.70
No. 13 1/2, Double Wheel Disc Hoe, plain.....	5.50	No. 72, Two-Row Pivot Wheel Cultivator, pin break standards and roller bearings, complete.....	60.00

Little Wonder Seed

Sower. A low priced sower that is well built. The bottom board is an inch thick. The sower does good work and gives satisfaction. Price, \$1.00. Mailing weight 5 pounds.

**Sterling Broadcast Seed Sower.**

This has the following special features:
A slant feed board—keeps hopper properly filled.

Automatic feed adjustment—starts or stops flow instantly.

Oscillating feed Agitator—positive force feed—can't clog.

Patent distributing wheel—no soldered joints, full regulation size, scatters seed evenly always.

Triple gears. All adjustable.

Large hopper—unequaled capacity, yet easy to handle. Well known for its accuracy in all broadcast seeding—fertilizer and all seed that can be sown broadcast. Carried comfortably by a strap over shoulder—not around neck—and is shaped to fit the body.

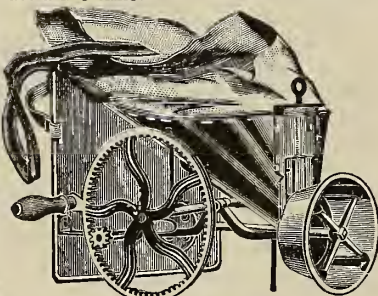
This seeder will sow any seed that is sown broadcast, such as oats, wheat, rye, flax, millet, clover, timothy, grass seed, etc. It can be very readily adjusted to suit the seed being sown. The feed plate and agitating device are of heavy sheet steel and all adjustments of spring steel. The hopper is of heavy duck and holds about one-half bushel. This machine has also a patented interlock, double flange, non-solder-joint distributing wheel, which is itself worth the price of the sower. It will be found the *strongest, neatest and most compact hand seed sower made*. By freight or express, \$1.50, customer to pay transportation. Mailing weight, 6 lbs.

Cahoon Seeder. Larger in size than the Sterling Seed Sower and will distribute the seed over a slightly larger area. One of these machines will last a life-time. It will seed evenly, 4 to 6 acres an hour. It will scatter the following distances; wheat, barley, rye, 25 ft., clover and timothy, 18 to 20 ft. The bag and hopper hold about 22 qts. Price, each, \$3.00. Mailing weight, 7½ lbs.

Eureka Hand Seed-

er. For sowing hot-beds, small gardens, etc. It will open the row, sow and cover beets, cabbage, carrots, celery, lettuce, radish, turnip, etc. with regularity. It sows much more evenly and several times as rapidly as by hand.

The quantity to be sown can be quickly regulated. The depth is also adjustable. It is the only drill made for sowing hot-beds. Simple and cannot get out of order. Price, each, \$1.00. Mailing weight, 4 lbs.



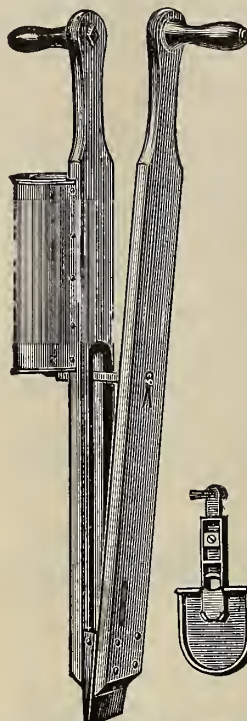
Cahoon Seeder.

Barker Weeder and Mulcher.

This is the most practical, as well as the most up-to-date, hand cultivator ever offered, doing far better work than any ordinary cultivator; with small pointed shoes or hoes. The Barker is made on the principle of a lawn mower, the long revolving blades working up the surface of the ground thoroughly, cutting the weeds and separating them from the soil, so that they are easily destroyed. More effective, as no weeds can be missed and a fine mulch is left over the surface of the ground, which prevents the evaporation of the moisture.

The Barker is made in three sizes, viz: 6-inch cut, 8½ inch cut, and 11-inch cut. Each machine is fitted up with leaf guards and tooth attachment. The 8½-inch cut is the standard size for onion sets and ordinary market garden crops. The 6-inch is for lettuce and crops that are planted in close rows. The 11-inch for crops that are planted from 14 to 18 inches apart in rows.

No. 6	D.	Complete with all attachments,	6	inch,	.....	\$5.00.
No. 8½	D.	" " " " " "	8½	"	.....	6.20.
No. 11	D.	" " " " " "	11	"	.....	7.60.



Acme Corn Planter.

Acme Corn Planter. Works in any soil; has a flexible and adjustable iron drop, and does not wear the brush. It has an iron seed box and iron channel. The foot is made of polished steel. It is well made, strong, durable, reliable and gives universal satisfaction. Price, \$1.00.

Triumph Hand Corn Plant-

er. A pioneer implement in this line and one that has always been popular. It is light and easily handled, yet strongly made, and with reasonable care, should last a long time. It works on any soil and never clogs. The operator can see the corn deposited in the ground. Price, \$1.00.

When desired we furnish the Triumph Planter, with an extra compartment in lower end of hopper, and an additional seed slide for planting pumpkin seed at the same time with corn. Price, \$1.15.



Potato Planter.

Eureka Potato Planter.

A light tubular planter. Its spring-closed jaws are especially designed to enter the soil easily, yet open wide enough to drop the largest seed. The dropping lever is adjustable for any depth of planting. The conveyor tube is galvanized iron. Price, each, \$1.00.

Asparagus Knife.

A drop-forged saw-tooth knife, very desirable in cutting asparagus without damaging the plant. It is also very useful in cutting weeds out of the lawn. Neat birch handle. Each, 35c. Mailing weight, 7 oz.

Lang's Hand Weeder.

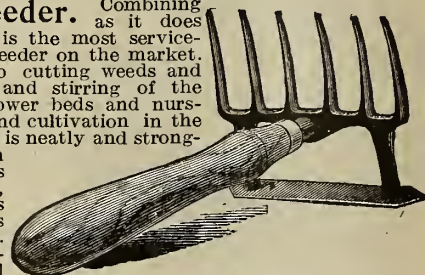
It is becoming more popular each year. It is very conveniently used and fits the hand so comfortably that the fingers are entirely free to use whenever necessary. Also very useful in thinning seedling vegetables as onions, etc. Price, 20c. Mailing weight, 5 oz.

Weeding Fork. Made very strong and durable from best quality steel. Four tines, brightly polished. Each, 35c. Mailing weight, 7 oz.

Strawberry Fork. Three prongs, well made and very convenient for use in the garden. Each, 35c. Mailing weight, 8 oz.

**Combination Weeder.**

Combining as it does both the rake and hoe, it is the most serviceable, durable, and perfect weeder on the market. It is especially adapted to cutting weeds and grass, shallow cultivation and stirring of the soil of all garden crops, flower beds and nursery stock that requires hand cultivation in the early stages of growth. It is neatly and strongly made of malleable iron (tinned) and the blade is of the best spring steel, sharpened on both edges and points, which allows weeding close to the plants. Everyone who has a garden, large or small, should have the Combination Weeder. Guaranteed to give satisfaction. Price, only 30c. Mailing weight, 8 oz.



Pruning Shears. Constructed with a powerful draw cut blade, volute spring, polished blades, black finish, length 9 inches. Easy action, strong cutting power. Each, 65c. A better grade for \$1.00. Mailing weight, 1 lb.

Telegraph Tree Pruner. The blade is thin, and being cut both small twigs and larger branches more easily and much better than other pruners. It does not tear the bark nor crush the wood but makes a clean cut. The blade can be taken out and easily sharpened or a new one put in its place. There is a steel coiled spring for throwing out the blade. The socket is threaded, and can be screwed to a pole of any length. No poles furnished. Price, each, \$1.00. Mailing weight, 1½ lbs. Extra blades, 15c. Extra springs, 15c.

Angle Trowel. This handy digger was originally intended for digging plantains and other weeds from the lawn; its slim blade, made strong by its angular form, being suited for prying and twisting; but it has also found great favor among ladies as a flower cultivator for loosening the soil in pots and among young plants for transplanting. The blade and shank are of one solid piece of best steel, set firmly in a nice handle. Each, 25c. Mailing weight, 8 oz.

Solid Steel Trowel. We offer a first-class, stout, all-steel, sharpened and polished 6-inch trowel made in one piece and large wooden handle, 25c each. Mailing weight, 9 oz.

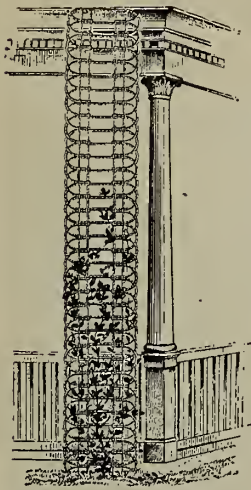
Weeding Hooks.

Each, 10c. Mailing weight, 4 oz.



Steel Point Dibber. For transplanting vegetable plants; steel point. Each, 30c. Mailing weight, 1 lb.

Christy Weeder. One of the best garden weeders we have yet seen. On one side it has a sharp serrated cutting edge which proves very effective with tough weeds and grass. The other side may be used for loosening the soil and for light surface weeding. It is very strong and durable and will last a lifetime. It is handsomely finished and very easy to handle. Price, 25c each. Mailing weight, 4 oz.



Double Porch Trellis.

Porch Trellis.

Very strong, durable and attractive in appearance. Just the thing for climbing vines, roses, etc. Made of heavy galvanized wire. Retains its shape and will last indefinitely. Very easily attached anywhere and as easily removed when desired. Very low in price and much superior to poultry netting and other articles used for this purpose. Made both single and double and three different widths. We can furnish any length desired.

Prices:				
Double Trellis	18 inches wide	....	15c.	per ft.
"	24 "	"	....	16c. "
"	30 "	"	....	17c. "
Single	18 "	"	....	08c. "
"	24 "	"	....	10c. "
"	30 "	"	....	12c. "

Rubber Plant Sprinkler.

This is the finest sprinkler made. It is durable, quickly and conveniently filled, throws a strong, fine spray, which thoroughly washes the foliage of the plants, removing dust and insects. Indispensable for floral work, window gardening and sprinkling clothes. Price, 12 oz. size, \$1.00; 7 oz., 75c; 4 oz., 60c. With angle neck permitting upward spraying, 12 oz., \$1.00; 7 oz., 80c. Mailing weight, 8 oz.

Painted Tree Labels.

3 1/2 inch iron wire.	(Mailing weight, 3 1/2 lbs. per 1000)	100	500	1000
3 1/2 inch copper wire.	(" " ")	\$.15	\$.60	\$ 1.00
		.20	.70	1.20

Painted Pot Labels.

4 inch.	(Mailing weight, 3 1/2 lbs. per 1000)	100	500	1000
4 1/2 inch.	(" " ")	\$.10	\$.40	\$.70
5 inch.	(" " ")	.15	.50	.80
5 1/2 inch.	(" " ")	.15	.60	.95
6 inch.	(" " ")	.20	.70	1.20

Painted Garden Labels.

8 inch.	(Mailing weight, 2 lbs. per 100)	100	500	1000
10 inch.	(" " ")	\$.40	\$ 1.90	\$ 3.70
12 inch.	(" " ")	.55	2.50	4.80
		.70	3.25	6.00

Japanese Cane Stakes.

Light, strong and durable, for tying up tall growing plants requiring support.

	Natural	100	1000	2 1/2 feet.	Doz.	100	1000
6 feet.....	\$.50	\$ 1.00	\$ 7.50	3 1/2 feet.....	.20	1.25	10.00
8 feet.....	1.10	2.00	16.00	4 feet.....	.25	1.50	12.00
10 feet.....	1.65	3.00	25.00	5 feet.....	.30	1.75	14.00

Red Clay Flower Pots.

Measurements are full inside. Crates or boxes 50c each, extra.

	Average No. per Crate.	Each	Doz.	100	1000
3 inch.....	1000	\$.02	\$.20	\$ 1.25	\$ 10.00
3 1/2 inch.....	600	.03	.25	1.50	12.00
4 inch.....	420	.03	.30	2.00	16.00
5 inch.....	171	.05	.55	3.80	30.40
6 inch.....	135	.07	.75	5.75	.....
7 inch.....	78	.11	1.20	8.65	.....
8 inch.....	44	.15	1.55	12.50	.....
9 inch.....	40	.25	2.65	20.50	.....
10 inch.....	32	.35	3.60	28.00	.....

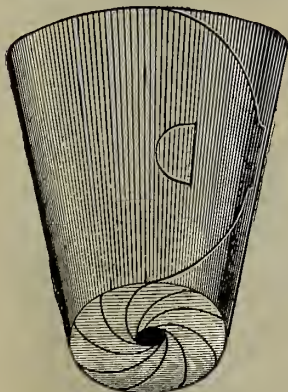
Six at dozen rate, 50 at 100 rate.

Water Proof Paper Flower Pots.

	Doz.	100	500	1000
2 1/4 inch. (Mailing weight, 3 oz. per doz.)	\$.10	\$.35	\$ 1.60	\$ 3.00
2 1/2 inch. (" " ")	.10	.40	1.85	3.50
3 inch. (" " ")	.15	.60	2.75	5.00
3 1/2 inch. (" " ")	.15	.75	3.40	6.25
4 inch. (" " ")	.20	.95	4.40	8.25
5 inch. (" " ")	.25	1.30	6.25	12.00

Red Clay Seed or Bulb Pans.

	Each	Doz.	50	100
6 inch.....	\$.06	\$.60	\$ 2.25	\$ 4.30
8 inch.....	.17	2.00	7.25	14.00



Waterproof Paper Flower Pot

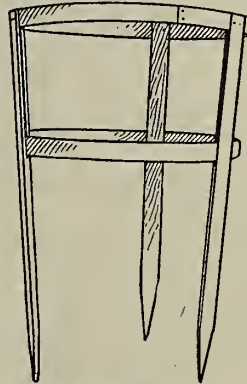


Indurated Fibre Rolling Stand.

Rose Arches. Regular double wire trellis mounted on tubular steel frame. After being placed in the ground, measures seven feet to the top, four feet from side to side and the frame measures 18 inches wide. Each \$9.00.

We can also furnish 2 1/4 inch painted wire, mesh mounted on steel frame, same size for \$7.50 each.

We shall be pleased to furnish prices on any special sizes or shapes wanted on receipt of specifications.



Tomato Support.

Tomato Support.

Very valuable for keeping tomato vines off the ground. Will largely increase the yield and improve the quality of the fruit. They are so inexpensive that every gardener should have them. Each, 15c, 2 for 25c; dozen, \$1.25.

We shall be glad at any time that we can be of assistance to our customers, to quote prices on any article for use in the garden. Space does not permit our listing but a few of the staple items. We are also in a position to give information and advice on garden subjects and all inquiries will be promptly answered.

Raffia. The best tying material for plants. Also used extensively in basket making. Natural color, lb., 25c; Colored; red, dark green, purple, blue, brown, crimson, black, pea green and orange, lb., 50c; 1/4 lb., at pound rate. When sent by mail, add postage at parcel post rates, given on page one.

Red Clay Fern Pans.

	Each	Doz.	50	100
5 inch.....	\$.04	\$.40	\$ 1.50	\$ 2.80
6 inch.....	.05	.60	2.25	4.30
7 inch.....	.10	1.10	4.00	7.60
8 inch.....	.17	2.00	7.25	14.00

Red Clay Azalea Pots.

	Each	Doz.	50	100
6 inch.....	\$.07	\$.75	\$ 3.10	\$ 5.75
8 inch.....	.17	2.00	7.25	14.00

Indurated Fibre Saucers to use with Flower Pots.

Indurated Fibre is a wood pulp product, hardened by chemical process under great pressure. It is light, strong, waterproof, neat in appearance and is easy to keep clean.

It is an exceptionally good material for flower pot saucers. Light, not easily broken, easy to clean. Will not sweat through and mould and its surface will not scratch woodwork, as earthenware does. Color, dark mahogany.

	Each	Doz.	Each	Doz.
5 inch	\$.13	\$ 1.44	9 inch	\$.17
6 inch	.14	1.50	10 inch	.18
7 inch	.15	1.62	12 inch	.21
8 inch	.16	1.74	14 inch	.28

Indurated Fibre Rolling Stands for Heavy Plants in Tubs or Pots.

The device consists of two steel pieces securely riveted and equipped with castors; a strong and compact support for plants, and can be readily rolled about from place to place without injuring the floor or carpet.

	Each	Doz.
12 inch for a 10 inch tub.	\$.60	\$ 6.60
14 inch for a 11 inch tub.	.75	7.80
16 inch for a 13 inch tub.	.90	9.60
18 inch for a 15 inch tub.	1.00	10.80

Takes tub diameter at bottom.

Thompson's Wheelbarrow Seeders.

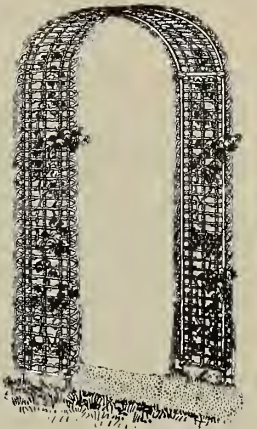
The best machine for sowing all kinds of grass seeds. Does not waste the seed, but distributes it uniformly over the ground. Can be set to sow any quantity of any kind of grass seed, including Clover, Timothy, Blue Grass, Bromus Inermis, etc. Seed can be sown on a windy day as the hopper is set close to the ground. It runs very easily and 30 to 40 acres a day can be seeded without difficulty, and the work will be done better than with any other machine. Note the different sizes and prices.

No. 1. For sowing all small seeds like Alfalfa, Timothy, Millet and Clover. 14 ft. hopper, price, \$7.00; 16 ft. hopper, price, \$7.25.

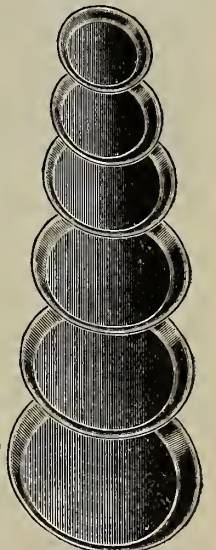
No. 2. Has a double hopper and sows all small seeds like Clover, Timothy, Millet, Alfalfa, also all chaffy seeds like Red Top, Orchard Grass and Blue Grass. 14 ft. hopper, price, \$9.00.

No. 6. In some localities the No. 1 Seeder did not sow enough seed to the acre. The No. 6 Seeder was designed a few years ago to meet these requirements. It sows the same kind of seeds as the No. 1 Seeder—all Clovers, Timothy, Hungarian, Alfalfa, Millet, Rape, Flax and other seeds of similar character, in quantities from four to twenty quarts to the acre. For the extensive sowing of Alfalfa we recommend the No. 6 Seeder. Price, with 14 ft. hopper, \$7.00; 16 ft. hopper, \$7.25.

No. 8. For sowing Bromus Inermis. Will not clog and distributes any quantity evenly. Will sow also other grass seeds. 10 ft. hopper, price, \$10.00.



Rose Arch.



Indurated Fibre Saucers.

HIGH GRADE FERTILIZER AND LAWN DRESSING

Good Profits can only be Obtained from Good Crops.

NORTHROP, KING & CO.'S STERLING FERTILIZERS

will prepare the soil so that it can be depended upon to produce good crops.

To those, if any there be, that doubt the efficacy of fertilizing the land, we say, try an acre or two as an experiment. The result will speak for itself. Our prices include sacks and cartage to depot in Minneapolis. 500 lbs. of one kind at ton rate, except where 500 lb. or 1000 lb. price is quoted. We cannot break bags except as noted.

The importance of a productive soil can hardly be overestimated; profitable crops cannot be grown on thin poor soil. Fertilizers are especially necessary in the home garden where the space is limited and one wishes to make every square foot count. On the farm the amount of fertilizer which it is profitable to use depends largely upon the value of the crop to be raised. See page 155 for general advice on the use of fertilizers and food elements which various plants require.

"Sterling" Fertilizers are recommended with as great confidence as Sterling Seeds: they are blended in the right proportions by those who have made a life-long study of this subject.



Northrup, King & Co.'s Sterling Garden and Lawn Fertilizer.

Is the result of careful study, experiments and experience. It is a complete fertilizer, containing in the right proportions, a concentration of the elements which nourish and feed grass into luxuriant growth. It produces a rich, green color, and insures a permanent evenness over the whole surface of your lawn. It is not unpleasant to handle, being odorless, and as it is dry and fine, it is easily put on. Two or three applications in a season, at the rate of a pound to every hundred square feet, will keep your grass in flourishing condition—perfectly healthy and able to stand any amount of sun if watered.

When and How to Put it on Your Lawn. The first application should be in the early spring—just as soon as the frost is out of the ground. Scatter it by hand carefully and evenly, so the distribution will be uniform. Use from 10 to 15 lbs. on every 1000 sq. ft. or 400 to 500 lbs. per acre, and if it can be put on just before a rain, so much the better. If unable to do this, wet it down with a hose as soon as possible after applying. In very hot weather, unless the hose can be used freely, sheep manure is the better fertilizer to use. For new lawns, Sterling Garden and Lawn Fertilizer can be used to good advantage either alone, using 1000 pounds per acre, or in combination with sheep or cattle manure, working it into the soil before sowing the seed. But this Fertilizer is in so concentrated a form that on old lawns it should never be applied too strong or unevenly, otherwise there is danger of its burning the grass. See our Lawn Booklet for further information, sent free upon request.

For Vegetables and Flowers. Free bearing can be encouraged by judicious use of Sterling Garden and Lawn Fertilizer. Apply in early spring at the rate of 15 lbs. per 1000 square feet, forking it in well. For late use, sprinkle it carefully around the plants and between the rows. Do not let it touch the plant roots. A teaspoonful or so stirred in the soil about the roots of each plant two or three times during the season will give you astonishing results. Always water plants thoroughly after fertilizing.

For House Plants. A teaspoonful of Sterling Fertilizer dissolved in a quart of water and this solution poured around the roots of house plants will greatly invigorate them. Stir solution while pouring so as to keep it well mixed, and apply as often as the plants seem to need it—say every week or ten days, or until they are as healthy as you wish.

Prices. 5 lbs., 30c; 10 lbs., 50c; 25 lbs., \$1.00; 50 lbs., \$1.75; 100 lbs., \$3.00; 500 lbs., \$12.50; 1000 lbs., \$25.00.

Northrup, King & Co.'s Pure Raw Bone Meal.

Analysis: Nitrogen, 3.75 per cent; equal to Ammonia, 4.50 per cent; Phosphoric Acid (from bone), 23.00 per cent.

This is finely ground and of first quality; it starts to decompose quickly so results from its use are soon apparent but it does not dissolve so fast as most chemical fertilizers so it continues for a long period its improvement in the soil fertility, it is less likely than other fertilizers to leach or waste. With bone there is no danger of burning the plants. It contains 23 per cent Phosphoric Acid, one of the principal plant foods. Use 3 to 5 pounds of bone meal for each tree and vine when setting it out, working it in well around the roots.

Lawns. For new lawns, use 500 lbs. of bone meal with a ton of sheep manure per acre. This should be plowed under or spaded in, several weeks before sowing the seed. Old lawns, top dress very early in spring with sheep manure and bone meal mixed, at the rate of 2200 lbs. per acre or 50 lbs. per 1000 square feet.

Field and Garden Crops. $\frac{3}{4}$ to 1 ton broadcasted and harrowed in. This is especially desirable for use with sheep or cattle manure which is rich in nitrogen.

Permanent Pastures and Meadows. Use $\frac{1}{2}$ to 1 ton per acre before growth starts in the spring. This will stimulate the growth of the plants and result in improving the stand. Its effect will be apparent for several years.

Roses and Flowering Plants. These need a large amount of Phosphoric Acid and it has been demonstrated that ground bone is one of the most useful forms from which to obtain it, since it furnishes both Nitrogen and Phosphoric Acid in slowly available forms. A good mixture for both the field and prepared soils is four parts of ground bone and one of muriate of potash, applied at the rate of four pounds per square rod, and preferably worked into the soil previous to setting the plants; a second application may be made in the fall at the same rate. For pot plants use one part bone meal to 50 parts of soil.

Price. 5 lbs., 25c; 10 lbs., 40c; 25 lbs., 75c; 50 lbs., \$1.35; 100 lbs., \$2.50; 200 lbs., \$4.50; 500 lbs., \$11.25.

Sheep Manure.

This is a splendid, complete fertilizer containing the necessary plant foods and is also rich in humus, or vegetable matter. It is excellent for general use either alone or in combination with other special purpose fertilizers. Having been kiln dried, there is little danger from weed seeds. It can be used freely as it is not likely to burn anything. Part of it is very soluble so its effects are usually apparent soon after the application and for a long time afterwards. It is carefully selected, dried, pulverized and screened.

For Lawns. Pulverized Sheep Manure is a fine fertilizer for the lawn. It should be applied by sprinkling lightly over the grass, much as one would sow grass seed, in the spring and up to July 15th. It requires no raking in. The color is not conspicuous and there is no objectionable odor. This will nourish the grass, act as a mulch, and tend to prevent the lawn from burning in hot weather. Use 50 lbs. per 1000 square feet or 25 lbs. with 25 lbs. of bone meal. See note on bone meal.

For the Garden. After the crop has been harvested in the fall, the garden should be given a good coating of Sheep Manure. In the spring put on another light coat and turn it under, or sow lightly in the rows. By the use of this fertilizer large crops will result, they will mature early and they will be of superior quality.

For Public Parks. Sheep Manure is used on some of the best public parks in this country, including the beautiful park system of Minneapolis.

For Truck Garden. Sheep Manure is a good fertilizer for the truck garden, producing better and earlier crops of onions, celery and other vegetables. **Price.** 1 lb., 5c; 5 lbs., 15c; 10 lbs., 25c; 25 lbs., 50c; 50 lbs., \$1.00; 100 lbs., \$1.75; 500 lbs., \$7.50; 1000 lbs., \$12.50. Delivered free within Minneapolis City limits at prices above in lots of 100 to 500 lbs.

Cattle Manure.

A high grade, natural fertilizer for general use, air dried and prepared so that none of its soil enriching properties are lost. It is especially desirable for making new lawns as it not only contains the essential plant foods but, also is rich in humus, or vegetable matter. Thus it enriches the soil and improves its physical texture, tending to make heavy soil mellow and increase the capacity of the light ones to hold water. There is no danger of using too much cattle manure as long as it is well distributed through the soil and does not come into direct contact with the plant roots.

This is an ideal preparation for run-down city gardens. It may also be advantageously used with special crop, chemical fertilizers as most of the latter become quickly consumed while the cattle manure is more lasting.

Scientists tell us that germ life is essential to a fertile soil. Few germs can live without plenty of humus, another advantage gained by the use of cattle manure which is rich in this substance. It should be handled like sheep manure but used more freely.

Use 500 to 2000 lbs. cattle manure per acre, or 12 to 40 lbs. per 1000 square feet, depending upon local conditions. Apply early in the spring on your sandy or worn out soil.

Bag, \$1.50; 5 bags, \$6.25; 10 bags, \$11.25. Special prices on large quantities. Delivered free within Minneapolis City limits in 1 to 5 bag lots.

N., K. & Co.'s Sterling Fertilizer No. 1.

For Market Gardeners and Truckers.

Consists principally of bone, blood and potash. The best for all garden crops, invaluable for either professional truckers, private or market gardeners. It is made of dissolved bone meal, nitrate of soda, dried blood, with potash in the form of sulphate added. It is easily applied either before or after planting, by sprinkling the surface of the soil and raking in. Sow 200 to 250 lbs. per acre, sown broadcast or drilled in. **Price,** 100-lb. bag, \$2.50; 200-lb., \$4.50; ton, \$42.00.

N., K. & Co.'s Sterling Fertilizer No. 2.

For Onions, Potatoes and General Fruit and Root Crops.

This brand is especially adapted for the crops mentioned, having plenty of potash and enough nitrogen to back it up. We advise not less than 400 lbs. per acre, for the best results. When a clover or green crop is plowed under before planting, 200 lbs. per acre would be sufficient. **Price,** 100-lb. bag, \$2.00; 200-lb., \$3.50; ton, \$32.00.

N., K. & Co.'s Sterling Fertilizer No. 3.

For Seed Corn.

Seed corn is one of the most important crops of the Northwest and we doubt if anything will show a larger proportion of profit if properly handled. This special brand will produce results that will surprise you. Use 200 to 300 lbs. per acre. **Price,** 100-lb. bag, \$1.75; 200-lb., \$3.25; ton, \$30.00.

N., K. & Co.'s Sterling Fertilizer No. 4.

For General Farm Crops.

A blend put up especially to meet the demand for a general purpose fertilizer. One that is suitable for all field, farm and grass crops. Distribute from 200 to 300 pounds an acre according to condition of soil. **Price,** 100-lb. bag, \$2.50; 200-lb., \$4.50; ton, \$40.00.



Root of Grass Showing Need of Fertilizing.



Root of Grass Showing the Effect of Using Sterling Garden and Lawn Fertilizer.

ANIMAL and CHEMICAL FERTILIZERS.

Elements of Fertility

Nitrogen: Its first function is to produce the green rank growth of the plant. Nitrogen makes greener and quicker growth, more succulent and nourishing food. In fruits, after serving first in making leaf growth, Nitrogen is chiefly needed in forming the seed without which fruit would not develop. When properly supplied with the necessary Phosphoric Acid and Potash, about 75 per cent of the Nitrogen goes into the seed and grain, which when consumed, forms blood and flesh.

Phosphoric Acid: Gives strength to the young plant in helping to expand its root growth and absorb the other necessary elements of plant food. It hastens and increases flowering and forces earlier maturity. As the crop gradually ripens from 70 to 90 per cent of the Phosphoric Acid consumed by the plant is transferred to the seed which, when consumed by animals, forms the bone of the body.

Potash: Its chief function is to form the cellular fibres, straw and woody growth of plants. It aids in producing sap, starch formation of grains, and juiciness and sweetness of fruits. After it has served these functions it is mostly returned in the sap to form the wood growth of trees and vines and the straw and stalks of grains. From 70 to 90 per cent of the Potash consumed by animals is returned in the excreta, and chiefly in the liquid portion.

Suggestions for Profitable Fertilizing

From extensive official experiments conducted during the last fifty years, and the general experience of our customers with every variety of soil, crop, climate and market conditions, the following general applications have proved capable of returning more than 100 per cent net profit on the yearly fertilizer investment for each class of crop.

Fertilizer for Grains	200 to 400
Fertilizer for Cotton	300 to 500
Fertilizer for Fruit	500 to 1,000
Fertilizer for Vegetables	800 to 1,600
Fertilizer for Tobacco	300 to 800
Fertilizer for Potatoes	300 to 500

If the same crop is grown on the land for more than one year at a time, it pays handsomely to fertilize each year. If a crop of green clover or other legume is plowed under to supply humus and nitrogen, then the succeeding grain or hoed crops can be even more profitably fertilized with a complete fertilizer to keep the soil in proper balance.

If soil moisture is normal in the growing season, due to climatic conditions or control by proper tillage, Swift's Fertilizers are profitably applied at seeding time. If the moisture is irregular in the growing season land should be plowed early enough in the fall to permit cultivation, and then the fertilizer can be more profitably applied in the fall, after plowing, and thus time and money saved at seeding time.

Swift's Fertilizers are crop producers. They contain animal matter, natural plant food, properly processed and combined to make the most productive Fertilizers.

Swift's Fertilizers become available as needed by the plant. They promote early growth, nourish the crop from seed to maturity and build up the soil.

We are not asking you to buy Fertilizers of unknown quality. Swift's Fertilizers have been on the market for more than twenty years and have demonstrated their superior crop producing properties.

Buy Swift's Fertilizers and increase your net profits.

Swift's Champion Wheat and Corn Grower (2=12=2)

Guaranteed Analysis

Nitrogen	1.65 per cent
Equal to Ammonia	2.00 per cent
Phosphoric Acid, available	12.00 per cent
Phosphoric Acid, Insol. (from bone)	1.00 per cent
Potash (K ₂ O, actual)	2.00 per cent

A very high grade fertilizer for Corn, Wheat, Rye and Oats, and good for all crops. Its results are lasting.

Ton, \$31.00; Bag, 125 lbs., \$2.40.

Nitrate of Soda. Quick in action and used for the nitrogen it contains. It creates rapid growth, is odorless, and entirely soluble. It should be applied only when the plants are above ground, usually in combination with other chemical fertilizers. We will without extra charge, if requested so to do, send information regarding its use on any farm or garden crop in which you are interested. Lb., 10c; 5 lbs., 35c; 10 lbs., 65c; 25 lbs., \$1.35; 50 lbs., \$2.50; 100-lb. bag, \$4.25; 200-lb., \$8.00. Write for prices on large quantities.

Muriate of Potash. A form of potash salts to be used with bone meal and pure dried blood or natural fertilizers on fruits, celery, asparagus, corn, oats, turnips, cucumbers, grapes, carrots, onions, peas, clover and beans. It should not be used on potatoes, flax, sugar beets, cabbage or cauliflower. Lb., 10c; 5 lbs., 35c; 10 lbs., 60c; 25 lbs., \$1.25; 50 lbs., \$2.25. Special prices on large quantities.

Sulphate of Potash. This fertilizer is used on all crops, but especially on tobacco, potatoes, flax, sugar beet, cabbage and cauliflower. It is the best for greenhouse use; may be applied either dry or in solution. Lb., 10c; 5 lbs., 35c; 10 lbs., 60c; 25 lbs., \$1.25; 50 lbs., \$2.25.

Kainit. German Potash Salt. Analysis: 12 per cent actual Potash. An excellent fall or winter dressing for the lawn or vegetable garden. Apply at the rate of 1000 lbs. per acre. Price, 100 lbs., \$1.50; 200 lbs., \$2.75.

Swift's Fertilizers.

Swift's Superphosphate (2=8=2)

Guaranteed Analysis

Nitrogen	1.65 per cent
Equal to Ammonia	2.00 per cent
Phosphoric Acid, available	8.00 per cent
Phosphoric Acid Insol. (from bone)	1.00 per cent
Potash (K ₂ O, actual)	2.00 per cent

Our Banner Brand. The best general crop producer on the market. It gives the plant an early start and insures a continuous, healthy growth up to and including maturity, and shows marked results on following crops. It adds to the fertility of the soil.

For all crops, particularly Corn, Wheat, Oats and Timothy.

Ton, \$28.00; Bag, 125 lbs., \$2.25.

Swift's Diamond A. Fertilizer (3=8=3)

Guaranteed Analysis

Nitrogen	2.47 per cent
Equal to Ammonia	3.00 per cent
Phosphoric Acid, available	8.00 per cent
Phosphoric Acid, Insol. (from bone)	1.00 per cent
Potash (K ₂ O, actual)	3.00 per cent

A high grade well balanced fertilizer.

Ton, \$30.00; Bag, 125 lbs., \$2.35.

Swift's Diamond B. Fertilizer (3=8=5)

Guaranteed Analysis

Nitrogen	2.47 per cent
Equal to Ammonia	3.00 per cent
Phosphoric Acid, available	8.00 per cent
Phosphoric Acid, Insol. (from bone)	1.00 per cent
Potash (K ₂ O, actual)	5.00 per cent

For Corn and hoed crops, such as Potatoes, Sugar Beets and all Vegetables. Insures an early start, continuous growth, earlier maturity, increased yield and greater profits.

Ton, \$35.00; Bag, 125 lbs., \$2.75.

Swift's Vegetable and Beet Grower (3=8=3)

Guaranteed Analysis

Equal to Ammonia	3.00 per cent
Phosphoric Acid, available	8.00 per cent
Potash (K ₂ O, actual, from Sulphate)	3.00 per cent

An all around truck brand. Also good for Corn, Wheat and Oats.

Ton, \$32.00; Bag, 125 lbs., \$2.50.

In regard to the fertilizer, I must say that I am very much pleased with the improvement in my vegetables and lawn.

BARNEY KUHR.

Canada Unleached Hard Wood Ashes.

Highly recommended for garden and field crops. Improves the texture of the soil and is indispensable for all crops requiring potash. Drives away insects. Price, 100 lbs., \$1.25; 200 lbs., \$2.00; ton, \$18.00.

Sterlingworth Plant Tablets.

A clean, odorless, concentrated plant stimulant. Their use promotes healthy, vigorous leaves and branches, and insures beautiful, luxuriant flowers. They build up the soil scientifically, and make frequent renewal less important. If you want healthy plants, ferns and fine flowers, these tablets will aid in obtaining them. Trial size box, sufficient for 10 house plants for three months, 10c, postpaid. Box, sufficient for 35 plants for three months, 25c, postpaid.

Excelsior Plant Food.

An odorless, concentrated, soluble fertilizer for house plants. It is immediately soluble in water and available to plant life from the moment of application. Two size packages, directions for use on each. Small size, 15c, (mailing weight, 8 oz.); large, 25c, (mailing weight 15 oz.).

Gypsum or Land Plaster.

Excellent for mixing with fresh manure to "fix" the nitrogen, 100-lb. bag, \$1.00; 200-lb. bag, \$1.75; ton, \$15.00.

Swift's Ground Dried Blood (16=0=0)

Guaranteed Analysis

Nitrogen	13.18 per cent
Equal to Ammonia	16.00 per cent

Where a highly concentrated Ammonia is required, Swift's Ground Dried Blood is the best to use. There is no loss from leaching as there is from Nitrate of Soda and Sulphate of Ammonia. It is quickly available without any reaction.

This is the ideal fertilizer for florists and greenhouse culture, for flowers and early market vegetables and for conservatories. Use 5 pounds per 100 square feet, or half pound per square yard of surface. Spread finely and evenly and stir with surface soil.

Ton, \$64.00; Bag, 125 lbs., \$4.50; 100 lbs., \$4.00; 50 lbs., \$2.15; 25 lbs., \$1.25; 10 lbs., 60c; 5 lbs., 35c; lb., 10c.

Swift's High Grade Acid Phosphate

Guaranteed Analysis

Available Phosphoric Acid	16.00 per cent
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Ton, \$22.00; Bag, 125 lbs., \$1.75.

Swift's High Grade Phosphate and Potash. (0=10=4)

Guaranteed Analysis

Phosphoric Acid, available	10.00 per cent
Phosphoric Acid, Insol. (from mineral)	1.00 per cent
Potash, K ₂ O, actual	4.00 per cent

Ton, \$35.00; Bag, 125 lbs., \$2.75. Five hundred pounds of any one brand at ton rate. We cannot offer broken lots except where noted. Prices include sacks and delivery f. o. b. cars, Minneapolis or St. Paul at our option.

7½ Bushels More Per Acre.

In regard to the results obtained by me from the use of the fertilizer, I have just finished threshing and I must say the results are very gratifying to me. 34½ acres of wheat not fertilized yielded 429 bushels or 12½ bushels per acre. 7 acres of wheat on which I used your fertilizer yielded 149 bushels or an average of 20 bushels per acre. Increased wheat yield per acre by the use of fertilizer, 7½ bushels.

The present market price for wheat is 90c. The increased yield of 52½ bushels on seven acres is worth \$47.25. Deducting the cost of the fertilizer from this, namely, \$24.40, leaves a net profit to me of \$22.85.

The fertilizer was applied at the rate of 300 pounds per acre and applied to the soil with a Vanbrunt Shce Drill.

J. K. NELLERMORE.

NORTHROP, KING & CO.'S STERLING POULTRY FEEDS

Prices subject to market fluctuations in value.

Sterling Poultry Feeds.



Our Sterling Poultry Feeds are economical to use because they contain only good, clean materials mixed in the proper proportions to make balanced rations for your birds at every age.

They will help your baby chicks grow rapidly, develop strong constitutions and round out into splendid pullets and cockerels.

For full grown stock you must supply feed which will not only nourish their bodies but also enable them to lay eggs. Corn alone makes fat, but very few eggs. Use Sterling Poultry Feeds for the "full egg-basket."

We are now selling over 2000 tons of these feeds annually, with very little advertising. Sterling Poultry Feeds are used at the great Minneapolis Poultry Show where some of the most valuable birds in the country are exhibited. We maintain our standard of quality regardless of market changes in price of grain. See our Red Figure Price List for latest quotations.

Northrup, King & Co.'s

Sterling Baby Chick Starter.

(Sold only in sealed bags.) To be fed the first three weeks.

A wholesome, ready prepared, starting food which will nourish the chicks so they can make rapid growth. Contains the necessary materials to form bone and feathers. Start feeding this when they are 36 hours old, give plenty of water and occasionally lettuce, or other tender greens. For the first few days the chicks should be fed every few hours, just what they will eat up clean each time. Be careful not to overfeed. If chicks are in a brooder, scatter feed in alfalfa meal or other clean litter so the baby birds will have to scratch for it. Avoid letting the chicks become chilled or overheated, as either condition may cause serious trouble. Always aim to give as much fresh air as possible, but prevent cold draughts in the brooder. Do not expect baby chicks to be constantly eating. Until they are 2 or 3 weeks old they should be quiet much of the time. Avoid the use of mush feeds which are likely to cause bowel trouble.

Sterling Baby Chick Starter is what your chicks need to bring them through the most critical period of their life. Get them started right. 5 lb. sack, 20c; 10 lb. sack, 30c; 25 lb. sack, 70c; 50 lb. sack, \$1.20; 100 lb. sack, \$2.15.

Northrup, King & Co.'s

Sterling Chick Feed.

(Sold only in sealed bags.) For chicks three weeks old and over. Like our other Sterling feeds this mixture embraces the best combination of seeds, grains, etc., that can be compounded for the purpose. It gives the chicks quick growth and tends to keep them in good health. To properly develop the chick, either for market or to become a producer of eggs it must be fed such food as will promote growth quickly and uniformly. This mixture is composed of various grains and seeds blended in the proper proportions, in addition to ground bone, fine meat scraps and a small per cent of grit. Use Sterling Chick Feed, clean utensils and see that the brooding conditions are right. Provide some shade in the runs during warm weather, and give plenty of tender greens. If milk is used always feed it sweet or sour, but do not keep changing, or it will cause indigestion. Buttermilk gives fine results. Let your chicks have plenty of exercise, make them scratch for their feed, but do not let the old hen lead her small chicks all over the farm. Keep the mother penned up until the chicks get strong.

Sterling Chick Feed is rich in protein which makes flesh and blood; it contains plenty of organic ash, which builds up bone. Feeding directions will be found in every sack. 5 lb. sack, 20c; 10 lb. sack, 30c; 25 lb. sack, 70c; 50 lb. sack, \$1.20; 100 lb. sack, \$2.15.

Northrup, King & Co.'s

Sterling Hen Feed.

(Sold only in sealed bags.) A splendid, well balanced feed, containing several kinds of grain, sunflower seed, cracked peas, oil meal and a small per cent of grit. This feed supplies the variety which hens need, since they always do better on a good mixture of grains than where just one or two are used. This is especially true of laying hens, and we strongly recommend this feed to everyone who desires to make the most out of his flock. Keep your hens exercising freely if you want them to lay eggs. Besides this feed the flock should be given oyster shell (or lime in some other form), charcoal and green food.

For winter egg production the flock should receive Sterling Hen Food twice daily and have access to Sterling Poultry Mash, which supplies the protein the hens require to stimulate egg laying in the cold weather. 5 lb. sack, 20c; 10 lb. sack, 30c; 25 lb. sack, 65c; 20 lb. sack, \$1.20; 100 lb. sack, \$2.20.

Northrup, King & Co.'s

Sterling Scratch Feed.

(Sold only in sealed bags.) It is composed of grains and seeds, oil meal, etc. Each item is included in the proper proportion to make up a well balanced ration.

This mixture is a trifle lower in protein than our Sterling Hen Feed and contains no peas, Sterling Scratch Feed however, contains more kinds of grain. Where the poultry man must buy all his feed it would be well for him to use both the Sterling Hen and Sterling Scratch Feeds for the sake of variety, feeding them alternately. For the man who raises part of his grain feed, either Sterling Hen or Sterling Scratch Feed would be satisfactory to use.

To keep hens healthy so they can get the most out of the grain they eat, they should have plenty of green feed. Plant oats or rape in the runs for spring and summer. Use mangels, turnips, cabbage or some other succulent vegetable in the winter.

For winter eggs keep the hens on dry ground or indoors on deep litter where they will have to scratch for the grain. A busy, working hen will not become too fat. Sterling Scratch Feed will help your flock "shell out" eggs. Packed in 100 lb. bags only, each \$2.10.

The above feeds all contain a small per cent of grit.



A Well Fed Flock of White Leghorns.

Northrup, King & Co.'s

Sterling Pigeon Feed.



(Sold only in sealed bags.) We use as much care in preparing this mixture as in the Sterling Chick and Hen Feeds. It is composed of bright, plump grain and seeds, including field peas, cracked flint corn, wheat, millet, etc. It is rich in protein and will quickly develop growing squabs, forming choice white meat. It is also a splendid food for homing pigeons as it contains a percentage of muscle and strength building material. Sterling Pigeon Feed makes an ideal food for the entire loft, both old and young. 50 lb. bag, \$1.50; 100 lb. bag, \$2.75.

Northrup, King & Co.'s

Sterling Poultry Mash.



A high protein mash for baby chicks or laying hens. It contains bran, meat meal, ground bone, middlings, alfalfa meal, oil meal, and pure ground grains. This is the very finest mixture we can prepare, regardless of price.

It has been demonstrated by numerous tests that hens lay a great many more eggs when part of the feed is given in a mash form. Sterling Poultry Mash contains the essential ingredients of the mash feeds used at the Australian Egg Laying Competition. It corresponds closely to the mashes recommended by the many state experiment stations but contains greater variety than most of them.

This mash may be fed dry or wet. Moisten with sour milk, buttermilk or water. Be careful not to overfeed when using it wet, a lump the size of a walnut is sufficient for a hen. Always have the feed troughs perfectly clean and never throw wet mash on the ground, or it will cause disease. When used dry the birds will not eat too much so it can be kept constantly before them.

Sterling Mash is unexcelled for baby chicks, but it is best to feed it to them dry. For young stock or laying hens it will surely produce pleasing results. If you mix it with buttermilk you will have a mash that cannot be improved upon for winter eggs. Chopped vegetables or greens may be added to the mash or fed separately, but since the mash contains ground alfalfa, not so much other green food is required. 50 lb. bag, \$1.20; 100 lb. bag, \$2.20.

All Grain Chick Feed.

This mixture supplies the demand for an all grain chick feed. It contains nothing but pure grains, sound and sweet, blended in the proper proportions. For chicks in the brooder or small runs we recommend our Sterling Chick Feed which is a more complete mixture.

All Grain Chick Feed is the right size for chicks over three weeks old and is especially prepared for feeding chicks which have a good run in which they can pick up insects or worms to supply their demands for some form of meat. Contains no grit or shell. Put up only in 100 lb. sacks; each, \$2.15.

All Grain or Star Hen Feed.

A first class, pure grain mixture containing no shell, grit or bone. This will be found a splendid feed to use in combinations with table scraps, fresh ground bone or some other feed, rich in animal protein. The fowls should also have plenty of grit and shell. 100 lb. sack, \$2.10.

Mixed Feed for Poultry.

To those who want a genuinely good mixture of grains and seeds, etc., that is properly proportioned to make an economical poultry food, this special mixture is recommended. The fact that we have sold many carloads in the last few months to customers who have bought this mixture before, is sufficient evidence of its popularity. As a low priced, scratch feed, it can not be equalled in quality anywhere at the price we ask for it. 100 lb. sack, \$1.80.

Northrup, King & Co.'s
Sterling Egg Starter.

A fine tonic and conditioner for moulting hens, birds just through moulting or those that are unthrifty for any other reason. Sterling Egg Starter stimulates the egg-making organs into healthy action. Directions on the package suggest how to use it for best results. If your hens are too fat they will not lay, even if you do give them a tonic. Such birds should receive less corn, more meat and be compelled to work for all the food they get. Then, feeding them Egg Starter will help them to get into condition. Price, 2-lb. carton 25c; 5-lb. carton, 50c; 25-lb. pail, \$2.00.

Northrup, King & Co.'s
Sterling Granulated Bone.

Made from fresh, green bones, which have the moisture, grease etc., extracted from them, leaving nothing but phosphate of lime and protein. Will keep in any kind of weather if kept dry. This bone is prepared especially for our trade.

This food is rich in protein and lime and it is well to keep it constantly before the birds so they can eat it freely. There is no danger of their overeating Sterling Bone. For growing chicks it should be fed with the grain so we include it in our Sterling Chick Feed. Sterling Granulated Bone comes in a fine size for chicks or mixing in a mash and coarse for hens. State whether you want fine or coarse ground. 5 lb. sack, 25c; 10 lb. sack, 45c; 100 lb. sack, \$2.90.

Northrup, King & Co.'s
Sterling Meat Scraps.

Meat scraps are rich in protein, the material which makes muscle and lean meat. Contain 50 per cent protein. Will keep in any climate under all conditions. We guarantee our Meat Scraps to be pure and free from any adulteration. They are manufactured especially for us and are fully up to the high quality of our Sterling Brand.

It is important that growing birds and laying hens have meat protein in some form, otherwise chicks will not develop properly and hens will not lay. In the fields the flock can pick up insects, worms and grubs but birds in small runs or laying houses must have a substitute. Hens should not be allowed to eat too much Meat Scraps, so it is best to mix them in the grain or mash mixture. They are a forcing food tending to make hens lay, but are so rich that a little of them goes a long way. 100-lb. sack, \$3.50; 50 lbs., \$1.85; 25 lbs., \$1.00; 10 lbs., 50c.

Darling's Meat Crisps. Contain 75 per cent protein, or 50 per cent more than Meat Scraps. These are made from fresh meat trimmings, taken from the meat markets, immediately cooked, and dried under pressure. They are always sweet and clean and will keep perfectly under any conditions where ground grain will remain sweet. Use as directed for Meat Scraps but as Meat Crisps are richer they will go farther. Sold in packages only, 3 lbs., 25c; 6½ lbs., 50c.

Blood Meal. A standard high protein preparation. This is guaranteed pure, free from adulteration and objectionable odors. A small quantity should be fed to the poultry occasionally to keep them in good health. 5 lb. sack, 25c; 10 lb. sack, 50c; 25 lb. sack, \$1.15; 50 lb. sack, \$2.10; 100 lb. sack, \$3.90.

Gluten Meal. Very rich in protein, usually containing about 40 per cent. This is of great value for increasing the protein in ground grain mashes. 10 lbs., 40c; 25 lbs., 75c; 50 lbs., \$1.35; 100 lbs., \$2.50.

Oil Meal. Aids digestion and assimilation of food. As it contains 36% of protein, it is combined with grains and other food so as to make a balanced ration. Improves the health, vigor and appearance of poultry. This comes in two sizes. State whether you wish fine or pea size. 10 lbs., 35c; 50 lbs., \$1.30; 100 lbs., \$2.40.

Kaffir Corn. A very valuable food for poultry, pigeons, etc. Its nutritive value is about the same as corn. It is especially desirable for feeding baby chicks. Bags contain about 150 lbs. 10 lbs., 25c; 100 lbs., \$1.90.

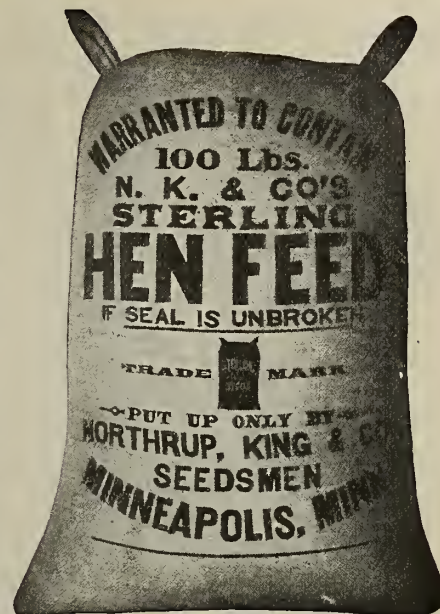
Unmixed Grains.

Prices named are those in effect when issuing this catalogue. Subject to market changes.

Price 100 lbs.	Price 100 lbs.
Cracked Kaffir Corn.....\$2.00	Hemp 25 lbs., \$2.50; 1b., 15c.
Wheat.....2.65	Sunflower, Extra Fancy.....\$7.80
Cracked Wheat.....2.75	Choice.....7.25
Corn, Yellow and White Mixed 1.70	Wrinkled Peas.....2.15
Cracked Mixed Corn.....1.80	Cracked Wrinkled Peas.....2.25
Corn, White Whole.....1.70	Broom Corn or Hog Millet.....2.35
Corn, White Cracked.....1.80	



Barred Plymouth Rocks like Sterling Feeds.



Sterling Feeds are sold only in sealed bags.

Bird Seed.

The following prices are for fancy quality except where noted. These seeds have been prepared for feeding canaries, parrots and pet stock.

Bird Millet, 1b., 10c; 3 lbs. for 25c.
Bird Rape, 1b., 20c; 25 lbs., \$3.75.
Canary, 1b., 20c; 3 lbs., 55c; 25 lbs., \$4.00.
Hemp, 1b., 15c; 3 lbs., 40c; 25 lbs., \$2.50.
Sterling Brand Mixed Bird Seed in 1 lb. cartons, each, 20c.
Sunflower Seed, Fancy, 1b., 15c; 3 lbs., 35c; 5 lbs., 60c; 50 lbs., \$4.00.
Sunflower Seed, Choice, 1b., 10c; 3 lbs., 25c; 50 lbs., \$3.75.
Above prices are F. O. B. Minneapolis, if wanted by mail add for postage at rates on page one.

For large quantities of any of these seeds, write for special quotations. All prices subject to market changes.

Bird Manna. A combination food, stimulant and medicine for cage birds. It will help to carry them through the moult without the loss of song. Price, 15c each, postpaid.

Blatchford's Calf Meal. The Perfect Milk Substitute.

This is a concentrated, dry substitute for milk which is being successfully used all over the country by dairy farmers and others who believe that milk is too valuable to feed to calves. This calf meal or milk-equal, when mixed with skim milk or water to the proper consistency is very similar to milk and contains all the elements of milk—protein, fat, and fiber, moisture and ash in the correct proportions. Every pound makes a gallon of sweet, wholesome milk equal. The expense is less than milk so it is economical to use. It is made from locust bean meal, pure flaxseed ground and with the oil left in, wheat flour, ground beans and peas, oil meal, cocoa shells, cocoanut meal, fenugreek, dried milk and salt.



Licks the Pail Clean.

Mr. W. R. Smith, Treasurer of the Holstein-Friesian Association of America and Secretary of the New York State Holstein-Friesian Breeders' Club, is a very successful breeder of Holsteins and owns a valuable herd. He writes that he has been using Blatchford's Calf Meal with most pleasing results.

Blatchford's Calf Meal is not a new discovery but has been used for many years. A trial will convince you of its merit. 50 lb. bag, \$2.00; 25 lb. bag, \$1.00; 100 lb. bag, \$3.50.

Discounts on Quantity Orders.

On orders for our mixed poultry feeds, including Sterling Baby Chick Starter, Sterling Chick Feed, Sterling Hen or Scratch Feed, All Grain Hen or Chick Feed, Mixed Feed for Poultry, Sterling Pigeon Feed, and Sterling Mash, amounting to 1000 lbs. we will allow 10c per 100 lbs. from single bag prices. If your order amounts to 2000 lbs., we will allow you 15c per 100 lbs. discount, from single bag prices. You are entitled to these discounts if your order for these feeds is for one kind or a combination of the kinds named above. This special discount does not apply to oyster shells, grit or other items not specifically named in the list above.

Don'ts for the Poultryman.

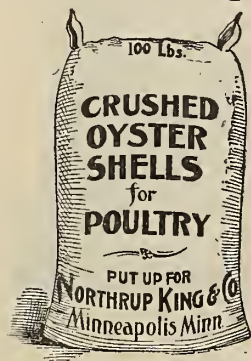
Don't keep any hens more than two years.
Don't keep more than one rooster for every 10 hens.
Don't keep young birds of different ages together.
Don't ever frighten the birds or disturb them more than is necessary.
Don't feed your flock at a different hour every day.
Don't treat your hens like machines but like individuals.

Alfalfa Meal. Made from new crop, pea green, kiln-dried Alfalfa hay. This is more valuable than clover meal and is highly recommended by prominent and successful poultry men. It contains a large per cent of protein and furnishes green feed in winter when green food is scarce. This may be mixed in with the mash, or moistened slightly with hot water. Then allow it to steam an hour before feeding. Alfalfa Meal is also widely used as litter for the brooder and chick pen since it is a good absorbent and does not injure the baby chicks if they eat it. 10 lbs., 30c; 50 lb. sack, 90c; 100 lb. sack, \$1.60.

Charcoal. This is an excellent regulator to keep fowls healthy. Have it constantly before them. Nothing takes the place of charcoal in this respect, as it purifies the blood, aids digestion and tones up the whole system. No matter whether your fowls are young or old, give them an occasional feed of charcoal. Two sizes, fine and coarse. 2 lb. package, 10c; 50 lbs., \$1.05; 100 lb. sack, \$1.75.

Northrup, King & Co.'s

Sterling Crushed Oyster Shell.



Hens must have lime in some form to furnish egg shell material. If you are having trouble with your flock laying soft or thin shelled eggs you should start feeding Oyster Shell immediately to remedy this condition. Crushed Oyster Shell is practically pure lime carbonate so there is almost no waste. It also tends to keep the hens from eating eggs. Old egg shells should never be fed to poultry as this is likely to get them started in the habit of egg eating. When you buy 100 lbs. of Sterling Brand Crushed Oyster Shells, you get 100 lbs. of shells, not 15 to 20 lbs. of dust and dirt mixed in, as our brand is specially cleaned. To get best results in poultry raising the use of something of this kind is positively necessary. Every poultry house or yard should have a pan or trough full, so that the fowls can have access to them at all times. Our price, bags included, 10 lbs., 15c; 50 lbs., 55c; 100 lbs., 85c. Write for special price on ton lots.

Crushed Clam Shell. Thicker and harder than oyster shell and is used quite extensively on that account, acting both as a food and a grit. The percentage of carbonate of lime is less than in Oyster Shells and is, therefore, less desirable. Our prices are very low. 10 lbs., 15c; 50 lbs., 50c; 100 lb. sack, 70c.

Mica Crystal Grit. Poultry, having no teeth should be kept constantly supplied with some sharp material to grind their food. Mica Crystal Grit is not only sharp and hard, but its properties are such that it acts as a tonic and contributes largely to the health and productive power of the fowl. Grit is just as necessary to newly hatched chicks as to older poultry as without it they cannot grind food. We have hen, pigeon and chick size. State which is wanted. Price, 10 lbs., 15c; 50 lbs., 55c; 100 lbs., 75c.

Pearl Grit. A clean, sharp grit containing elements both helpful and necessary for the proper nutrition of food and production of eggs. It is white in color and contains no dirt, causing no waste. Please state whether you want fine or coarse, when ordering. Price, 10 lbs., 15c; 50 lbs., 55c; 100 lbs., 85c.

Crys-Co. A grit and shell producer combined. It is composed of molluscan shell formation or petrified shell, crushed to the proper sizes for hens, chicks and pigeons. Contains 99 per cent pure carbonate of lime, and 1 per cent flinty matter, the lime forming shell, with enough grit to grind the food and aid digestion. It makes hard shells, thus increasing the hen's laying power. Hens that lay soft shelled eggs usually acquire the habit of eating them, but by the use of Crys-Co this danger will be largely overcome. Feed the same as Oyster Shells or grit. Price, 85c per 100 lb. bag.



French's Poultry Mustard.

F. O. B. Minneapolis.

French's Poultry Mustard is manufactured expressly for use with poultry and is different from the ordinary table mustard in its preparation and constituents. It is a splendid conditioner for moulting birds and a fine stimulant for egg laying. Mustard is now in general use at many large poultry farms. One teaspoonful for every six fowls is the right quantity; mix it with the dry meal first and then add water.

200 lb. Barrel.....	per lb.	18½c	10-lb. Box.....	per lb.	20c
100 " Keg.....	"	19c	5-lb. ".....	"	20½c
50 " ".....	"	19½c	3-lb. ".....	"	21c
25 " Pail.....	"	20c	1½-lb. ".....	each	35c

Keeping Poultry Healthy.

Some say the best medicine for a sick chicken is the axe. This is sometimes true, but if it is a case of a whole flock being sick it means a big loss. Preventive measures are best.

In the summer the birds should have a shady yard where they can find plenty of green feed. If a run is attached to the poultry house it should be divided so that a crop can be grown in one part while the birds are eating a green crop in the other. Rape, oats and wheat are excellent green crops for this purpose. Alfalfa is splendid and when one is in a hurry to start a little Alfalfa it is advisable to plant roots, which we offer on page 140. The roots become established quickly and make rapid growth. If a wire nest is placed over each Alfalfa plant it will prevent the hens from injuring the plant and the young shoots will grow up through the wires.

For shading the yard, sunflowers are the best annual plant, while plum trees are best for permanent planting. Keep the poultry house dry and free from lice, do not overfeed the flock; give them pure water and some kind of succulent food all winter—Cabbage, roots, or Alfalfa. The birds should have all the grit, shell and charcoal they need and all these should be kept constantly before them.

At the first symptom of illness isolate the sick birds at once so they cannot spread contagion through the flock. Then disinfect everything thoroughly with Noxicide. It always pays to keep Conkey's Roup, Cholera and White Diarrhoea Remedies on hand. When any of these troubles start, quick treatment is most important.

Conkey's Remedies are perfectly reliable and complete directions accompany every package. Conkey's Poultry Book containing much valuable information will be sent free upon request.

Booklet on "Hen Wealth," containing information of value about the raising and care of poultry, sent without charge with orders, if requested.



Conkey's Poultry Remedies and Insecticides.

Conkey's Poultry Remedies.

Poultry cannot be profitable unless they are in a healthy condition. We offer a specific remedy for each disease. The importance of prevention by the use of a germicide, like Nox-i-cide, should not be underestimated. This line is complete and very reliable.

Conkey's Roup Remedy. For fowls that sneeze, gasp and wheeze, also have a watery discharge from the nostrils and eyes. Follow directions on each box and cure will be effected. Three sizes, 25c, 50c and \$1.00, postpaid.

Conkey's Cholera Remedy. Placed in drinking water. Directions on every box. Two sizes, 25c and 50c, postpaid.

Conkey's Lice Powder. Will successfully kill body lice on fowls. 5 oz. package, 10c, (postpaid, 15c); 15 oz. pkg., 25c, (postpaid, 40c); 3 lb. pkg., 50c.

Conkey's Lice Liquid. Will kill mites and acts as a disinfectant. Applied to walls, roosts and crevices with a brush or sprayer. Qt., 35c; ½ gal., 60c; gal., \$1.00.

Conkey's Poultry Tonic. For fowls run down, off feed, recovering from disease or during moulting season. Price, 25c, (postpaid, 30c).

Conkey's Poultry Laxative. Price, 25c, postpaid.

Conkey's Laying Tonic. Not a food, but a medicinal preparation to increase egg production. Keeps hens in the best laying condition. 1½ lb. package, 25c; 3½ lb. pkg., 50c; 7 lb. pkg., \$1.00; 25 lb. pail, \$3.00.

Conkey's Noxicide. A wonderful disinfectant and germicide. Fine for many purposes—cleaning incubators and brooders, washing founts and troughs and spraying wherever lice, mites or germs are present. Pint, 35c; qt., 60c; ½ gal., 90c; gal., \$1.50.

Conkey's Bronchitis Remedy. Price, 50c, postpaid.

Conkey's Chicken Pox Remedy. Price, 50c, (postpaid, 55c).

Conkey's Limber Neck Remedy. Price, 50c, (postpaid, 55c).

Conkey's Rheumatic Remedy. Price, 50c, (postpaid, 55c).

Conkey's Black Head Remedy. Price, 50c, postpaid.

Conkey's Poultry Worm Remedy. Price, 50c, postpaid.

Conkey's White Diarrhoea Remedy. Price, 50c, postpaid.

Conkey's Fly Knocker. Qt., 35c; ½ gal., 60c; gallon, \$1.00.

Conkey's Scaly Leg Remedy. Price, 50c, (postpaid, 55c).

Conkey's Gape Remedy. Price, 50c, (postpaid, 55c).

Conkey's Healing Salve. Price, 25c, postpaid.

Conkey's Head Lice Ointment. Price, 1 oz., 10c; 3 oz., 25c; postpaid.

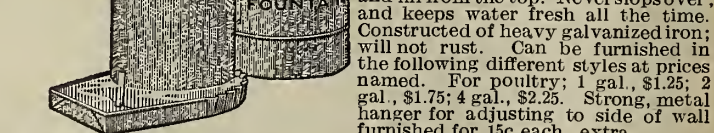
Germozone. Use for roup, colds, canker, swelled head, bowel complaint, etc. A little, twice a week in the drinking water, will keep crop, stomach and bowels in order. Roup, in early stages, can generally be cured in two or three applications. Use Germozone in any case of sickness of fowl, chick, bird, dog, cat or other pet animal, by giving it in drinking water at a proportion of one tablet to a quart of water. In case of serious illness follow the directions given in the pamphlet accompanying each package of Germozone.

Germozone is prepared in tablet form at 50c per package.

N. W. Fountain and Feeder.

Feeds water, grain, grit, etc., automatically. Is easy to fill and operate, as illustrated. Pan is released by lifting trigger. Very easy to clean. A sanitary fountain. Will fit any size Mason jar. No jars furnished by us. Pans are constructed of heavy iron with a double lead coating. Will not rust or corrode. These pans will outlast several tin or galvanized pans, besides being more sanitary. Prices, No. 5, 5 inch pan, each, 15c; No. 6, 6 inch pan, each, 20c. If by mail, add 3c each for postage.

N. W. Fountain and Feeder.



Moe's Top Fill Drinking Fountain.

Moe's Top Fill Drink=ing Fountain.

The cause of many poultry troubles is traceable to impure water, due to contamination from the birds themselves. Moe's Top Fill fountains reduce this danger, as they always supply just enough pure water. Constructed with dead air space, which keeps water cool in summer and warm in winter. Simple in construction and easily cleaned. Remove cover and fill from the top. Never slop over, and keeps water fresh all the time. Constructed of heavy galvanized iron; will not rust. Can be furnished in the following different styles at prices named. For poultry: 1 gal., \$1.25; 2 gal., \$1.75; 4 gal., \$2.25. Strong, metal hanger for adjusting to side of wall furnished for 15c each, extra.



Duplex Poultry Marker. Punch is reversible and cuts two sizes as shown, giving practically two tools for the price of one. Handle nicely nickel-plated and polished, and the marker complete weighs ½ ounce. Price, 25c each, postpaid.

Philadelphia Poultry Marker.

It is very important to keep a careful record of the different hatches of chicks and no better way has been devised than by the use of this little machine. Over 200 different marks can be made by punching between different toes. It is made in two sizes, one for chicks and one for adult fowls. The sizes are shown by the black dots at the illustration. Price, each, postpaid, 25c. State which size is wanted.



Philadelphia Marker.

Poultry Punch. Made on the plan of a ticket punch. It makes a sharp, clean cut, thus avoiding injuring or tearing the web. It is so constructed that it cannot pinch or bind. Very strong and durable. The most convenient and serviceable punch on the market. Each, 40c, postpaid.



Leader Adjustable Leg Bands.

Latest and best adjustable leg band out. Has neatest, most compact and smoothest fastening of any band on the market. Easily attached, absolutely secure and has no catching points. Made from heavy aluminum and are strong and substantial and will hold their shape. Made in two sizes; No. 1 for Bantams or Mediterraneans, No. 2 for Americans to Asiatics and turkeys. Not made in pigeon sizes. Numbered only 1-12, 1-25, 1-50, 1-100. Always give sizes and state how bands are to be numbered. Prices: Doz., 15c; 25 for 25c; 50 for 40c; 100 for 65c; 250 for \$1.50; 500 for \$2.75; 1,000 for \$5.25, postpaid.

Diamond Egg Carrier.

Saves Money in Cost, Time, Safety, Space, Weight, Express. The Diamond Egg Carrier is entirely new and in a class by itself. It is shipped flat, thereby saving a large amount on freight and express. The peculiar construction of the box in V-shaped wedges permits its being made of very light material while still retaining great strength. It is easily set up. A child can put them together and pack the eggs. They can be packed on a moment's notice. The eggs do not come in contact with the outside of the box at all, having a cushion on all sides, and being wrapped in tissue paper, there is no jar, thus insuring safe transportation. Owing to their light construction, you can ship by express anywhere in the United States at the maximum charge of 45c per box, the full box weighing less than four pounds. Eggs cannot be taken out or substituted without detection.



Diamond Egg Carrier.

Each package contains one dozen egg carriers, complete, with address labels, gum paper and tissue paper.

The 15 to 25 egg size carriers are made of single and double corrugated board. For long trips or very rough handling the double board carriers are safer.

No orders taken for less than 1 dozen.

	Single Doz.	Double Doz.
15 Egg size	\$1.50	\$1.75
30 Egg size	2.75	3.00
25 Egg size	2.50	2.75
9 Egg size for turkey and goose	1.50	1.75
50 Egg size	.....	6.00
75 Egg size	.....	8.40
100 Egg size	.....	11.40

Egg Testers.

It is desirable to test eggs after they have been in the incubator seven days, and again on the twelfth day, removing all those that are infertile or with a dead germ. The tester is also useful in candling eggs before selling them. This is made the proper size to fit a common No. 1 burner. Each, postpaid, 35c; by express or freight, 25c.

Egg Tester.

Stone Drinking Fountain.

These require little description. They are strong and so made that they cannot be overturned. They are easily filled and kept in sanitary condition. Prices: ½ gallon, 25c; gallon, 35c; 2 gallon, 45c. Unless ordered with other goods add 10c each for packing charges.

Excelsior Drinking Fountain.

It is highly important that poultry be given plenty of pure drinking water and that it be kept in clean containers. Those fowls having disease will contaminate the rest of the flock, unless the water is kept sanitary. The Excelsior Fountain is made of heavy galvanized iron, easily cleaned and filled. Made in four sizes. Two styles, flat or conical top. Price, quart, 20c; ½ gallon, 35c; gallon, 50c; 2 gallons, 75c.



Stone Drinking Fountain.

Automatic Drinking Fountain.

Made to fit any size Mason jar. Can be set anywhere, on floor, pigeon loft, in brooder or fastened to wall. It will not turn over and chicks cannot drown in it. Easily cleaned. Aluminum, cannot rust or crack. Jars not furnished. Each, 25c, (postpaid, 30c).

Combination Food and Water Fountain.

Most popular and best fountain ever invented for little chicks. Keeps water clean, sweet and cool, chicks can not get wet or chilled in it—better than a dozen roup cures on this account.

Makes an A1 brooder fountain, and on account of being hung up it is impossible for chicks to tip it over and spill contents. Feeds either water or grain, grit, oyster shells, etc., and with the glass receptacle you can always see at a glance the amount of food or water left in the fountain. They are easily cleaned and filled and any ordinary bottle or fruit jar can be used with them. No bottles or cans are included with fountains. Price, only 25c each. Mailing weight, 1 lb.



Excelsior Dry Feed Hopper.

Dry feeding has become very popular. It has proved to be a satisfactory, economical and labor saving method of feeding poultry. Hopper is well made of heavy galvanized iron, has a hinged lid and being made of metal affords freedom from dampness and mold. For dry feeding both hard grain mixtures and dry mash, this hopper is superior. Has two compartments, one for dry mash or mixed grain holding about 6 qts., the other for grain or beef scraps, holding about 3 quarts. Top of box has a sharp pitch or angle, so birds cannot roost on it and the front of box is straight up and down so the dry mash does not clog. Price, each, 75c.

Excelsior Grit and Shell Box.

No poultryman can really afford to be without this handy labor saving device. This box or hopper is well made of heavy galvanized iron. It has three compartments, and may be used for feeding grit, oyster shell and charcoal; or grit, shell and granulated bone. It feeds automatically and prevents waste. With this self-feeding box hung up on the side walls of the pen, the birds can help themselves at all times and the supply is kept clean. Price, each, 50c.

Hygieia Nest Egg.

This egg is almost an exact imitation of a hen's egg, but contains a powerful disinfectant which will expel lice and vermin. Much of the disease among poultry is caused by lice. Hens will not lay when troubled by lice and to increase your profits and relieve your hens use these eggs. Price, each, 7c; doz., 75c. If by mail add 2c extra for postage on each egg.

Opal Nest Egg.

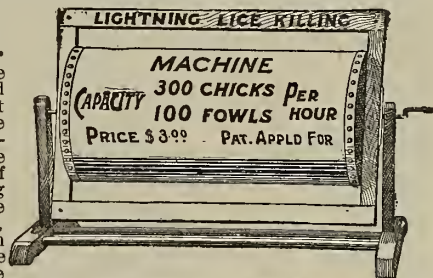
Clear white, flint nest eggs, will last a lifetime. Each, 3c; doz., 30c, postpaid.

Lime Nest Egg.

Made of lime and covered with paraffine. Weigh and look like hen's eggs. Practically unbreakable and do not get cold in winter like other nest eggs. Each, 3c; doz., 30c. If sent by mail, add 2c each for postage.

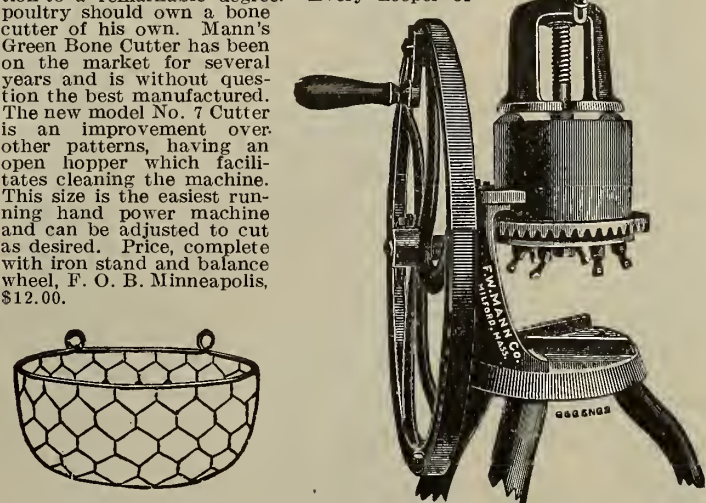
Lightning Lice Killing Machine.

This machine will do the work in an hour that would take a day to do by hand. It saves both time and lice powder. By using this machine and Conkey's Lice Powder, there is no need of chicks or grown fowls having lice. It will kill all body lice on poultry. To do the work, place the fowls or chicks in the machine with a little lice powder and turn the crank slowly a few times. The No. 2 machine is the best size for general use. It will hold 30 to 40 chicks or 4 to 8 hens at a time. Weight of machine, crated for shipment, 15 lbs. The cylinder is 12 inches in diameter and 29½ inches long. Price, \$3.00.



Mann's Bone Cutter.

Fresh ground bones are very valuable for feeding laying hens and will increase the egg production to a remarkable degree. Every keeper of poultry should own a bone cutter of his own. Mann's Green Bone Cutter has been on the market for several years and is without question the best manufactured. The new model No. 7 Cutter is an improvement over other patterns, having an open hopper which facilitates cleaning the machine. This size is the easiest running hand power machine and can be adjusted to cut as desired. Price, complete with iron stand and balance wheel, F. O. B. Minneapolis, \$12.00.



Mann's Bone Cutter.

Wire Nests.

These nests are strongly made from heavy Japanned steel wire and will last a lifetime. They are far superior to boxes, will not harbor lice and are always clean. Each, 15c; doz., \$1.50.



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MINNEAPOLIS,
MINNESOTA.

ON PREVIOUS LISTS ON ALL GRASS and FIELD SEEDS and POULTRY FEEDS

3 BRANDS

Please Note!

On account of the fluctuating prices on Grass and Field Seeds, it has been impossible for us to print values on some items in our 31st Annual Catalogue, especially on clover and millet. Owing to the large edition of catalogues we send out, we are obliged to begin printing several weeks before they are mailed. On some seeds, values have necessarily changed, all prices printed in our catalogue being those in effect at the time of publication. Prices in this list, therefore, are those existing on the date given hereon and cancel all prices given in our catalogue on the same items. Quality considered, prices are as low as can possibly be made and are subject to market changes. So we reserve the right to forward seed to the value of the money sent us, according as the market is higher or lower. These prices include sacks and free delivery to any railroad station in Minneapolis. If Grass or Clover Seeds are wanted by mail add 10 cents a pound for postage. Please note that the BUSHEL price is higher than the 100 lb. rate; this is to cover the extra expense of putting up small packages. In ordering always state grade wanted. Should our prices in any instance appear high, please send for samples and compare qualities.

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JANUARY 9, 1915.



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5 lbs.	2.85
0 lbs.	5.50

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PRICE LIST

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FOR THE YEAR 1917

THE NATIONAL BUREAU OF INVESTIGATION, U.S. DEPARTMENT OF JUSTICE, has the honor to acknowledge the receipt of your order of the 10th inst. for a copy of the Price List for the year 1917, and to inform you that the same has been forwarded to you by mail of the 12th inst.

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98. Copy of the Price List for the year 1820	1.00
99. Copy of the Price List for the year 1819	1.00
100. Copy of the Price List for the year 1818	1.00

The Mark
of Quality.

OUR THREE TRADE-MARKED

NORTHROP, KING & CO.'S STERLING BRAND SEEDS are as fine seeds as any obtainable, both in purity and high germination. They are sold only in sealed bags.

NORTHLAND BRAND SEEDS satisfy all who wish fancy seed but do not care to pay a premium for our Sterling Brand. The supply of seed suitable for use as Sterling is often very limited and when that is exhausted we recommend Northland as the next best seed obtainable.

VIKING BRAND SEEDS are bright and clean, of good purity and germination. For those who desire choice seed at a moderate price this is the ideal brand.

All three brands comply with the pure seed laws of your State.

Disclaimer

Northrop, King & Co. do not give, and their agents and employees are forbidden to give any warranty, express or implied, as to description, quality, productiveness, or any other matter of any seeds, bulbs or plants they send out, and they will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms, they are at once to be returned and money paid for same will be promptly refunded.

CLOVERS.

	Lbs. per acre		
Medium Red Clover—	if sown alone	Bu. 100 lbs.	
N. K. & Co.'s Sterling Brand			
(Sold only in sealed bags)	8	12.10	19.60
Northland Brand	8	10.90	17.85
Viking Brand	9	10.55	17.20
Prime	10	10.10	16.50
Mammoth Red Clover—			
N. K. & Co.'s Sterling Brand			
(Sold only in sealed bags)	8	12.25	19.85
Northland Brand	8	11.10	18.15
Viking Brand	9	10.70	17.45
Alsike Clover—			
N. K. & Co.'s Sterling Brand			
(Sold only in sealed bags)	8	12.00	19.45
Northland Brand	8	10.85	17.75
Viking Brand	9	10.50	17.10
Prime	10	10.05	16.35
White Clover—			
N. K. & Co.'s Sterling Brand			
(Sold only in sealed bags)	7	.....	.....
Northland Brand	8	25.45	42.05
Viking Brand	8	22.80	37.65
Sweet Clover—			
White Blossom	10	17.20	28.30
Yellow Blossom	10	15.85	26.10
Crimson or Scarlet Clover	15	.....	12.90
Sainfoin or Esparectte	30	.....	14.00
Alsike and Timothy Mixed	15	.....	10.50

ALFALFA.

	Lbs. per acre	Bu. 100 lbs.	
Montana Grown, N. K. & Co.'s			
Sterling Brand (Sold only			
in sealed bags)	10	13.75	22.50
Montana Grown, Northland			
Brand	12	12.40	20.25
Montana Grown, Viking Brand	12	11.20	18.25
Dakota Grown, N. K. & Co.'s			
Sterling Brand (Sold only			
in sealed bags)	10	12.85	21.00
Dakota Grown, Northland			
Brand	11	11.90	19.50
Dakota Grown, Viking Brand	11	11.50	18.75
American Grown, N. K. &			
Co.'s Sterling Brand (Sold			
only in sealed bags)	10	11.40	18.50
American Grown, Northland			
Brand	10	10.90	17.75
American Grown, Viking			
Brand	10	10.45	17.00
Dry Land Alfalfa	10	12.25	20.00
Turkestan Alfalfa	10	10.90	18.00
Grimm Alfalfa	10	36.50	60.00

"NITRAGIN."

Bacteria Culture for inoculating Alfalfa, Clover and all other legumes. State the crop to be inoculated, when ordering. Price, acre size can, \$2.00; 5-acre size can, \$9.00, postage and express, extra. Parcel Post, 10c per acre extra.

TIMOTHY.

	Lbs. per acre	Bu. 100 lbs.	
N. K. & Co.'s Sterling Brand			
(Sold only in sealed bags)	10	4.95	10.25
Northland Brand	10	4.40	9.15
Viking Brand	12	4.20	8.80
Prime	13	3.95	8.20

BLUE GRASS.

Kentucky, N.K. & Co.'s Sterl-			
ing Brand, solid seed (Sold			
only in sealed bags)	20	2.40	15.50
Kentucky, Northland Brand,			
solid seed	24	1.80	11.25
Kentucky, Viking Brand, sol-			
id seed	24	1.65	10.75
Canadian Blue Grass	28	1.40	9.50
English Blue Grass or Meadow			
Fescue	24	2.25	14.40

BROMUS INERMIS.

	Lbs. per		
	acre	Bu. 100 lbs.	
N. K. & Co.'s Sterling Brand			
(Sold only in sealed bags)	20	2.35	15.15
Northland Brand	20	1.75	11.15
Viking Brand	20	1.55	9.40

RED TOP (SOLID SEED.)

Solid Seed Red Top is by all means the most economical to use. 14 lbs. to the bushel.

N. K. & Co.'s Sterling Brand	10	.....	.....
Northland Brand	11	5.60	38.00

ORCHARD GRASS.

N. K. & Co.'s Sterling Brand	22	3.10	20.30
(Sold only in sealed bags)	28	2.75	17.65
Viking Brand	28	2.75	17.65

GRASS SEED SOWERS.

Sterling Broadcast Seeder, each	\$1.50
Cahoon Seeder, each	3.00
Little Wonder	1.00
Thompson Wheelbarrow Seeders	\$7.00 to \$10.00

according to size.

LAWN GRASS.

	Lbs. per acre.		
N. K. & Co.'s Sterling Mixture			
(sold only in sealed bags)	100		
25 lbs.	\$6.75	
50 lbs.	13.00	
100 lbs.	25.00	
N. K. & Co.'s Shady Place Mixture	80		
25 lbs.	8.00	
50 lbs.	15.50	
100 lbs.	30.00	
N. K. & Co.'s Terrace Mixture	80		
25 lbs.	8.00	
50 lbs.	15.50	
100 lbs.	30.00	
Lawn Restoring Grass Seed	100		
25 lbs.	9.25	
50 lbs.	18.00	
100 lbs.	35.00	
Fair Green Mixture		
25 lbs.	8.00	
50 lbs.	15.50	
100 lbs.	30.00	
Putting Green Grass Seed		
25 lbs.	11.75	
50 lbs.	23.00	
100 lbs.	45.00	

MISCELLANEOUS GRASS
SEEDS.

	Bu. 100	Lbs.	
Perennial or English Rye	28	1.30	8.00
Italian Rye Grass	28	1.35	8.50
Western Rye Grass	15	.....	12.00
Fancy and Imported Grasses on			
and 145. Prices unchanged.			

GARDEN AND LAWN
DRESSING.

N. K. & Co.'s Sterling (Best for Lawns.)					
5 lbs....	30c,	10 lbs....	50c,	25 lbs....	\$1.00
50 lbs...	\$1.75,	100 lbs...	\$3.00.		
N. K. & Co.'s Pure Raw Bone Meal					
25 lbs.,	75c;	100 lbs.,	\$2.50;	500 lbs.,	\$11.25

FERTILIZERS.

Pulverized Sheep Manure. A first class Fer-			
tizler for general use.			
Per 100 lbs.	.....	\$1.75	
Per 1000 lbs.	.....	12.50	
Cattle Manure, per bag \$1.50; 5 bags, \$6.25;			
10 bags, \$11.25.			

GARLIC.

	Prices subject to market changes.
Garlic, per lb.	.....\$ .25
5 lb. lots, per lb.	..... .20

SEED POTATOES.

Strictly First Class Hand Picked Stock.
Prices Subject to Market Changes.

	Bu. 10 Bu.	
Burbank	1.10	.95
Carman No. 3	1.20	1.00
Extra Early Ohio	1.20	1.00
Early Triumph	1.20	1.00
Early White Albino	1.20	1.00
Irish Cobbler	1.35	1.15
Peerless	1.20	1.00
Pingree	1.15	1.00
Rose	1.50	1.35
Rural New Yorker No. 2	1.20	1.00
Russet or Netted Burbank	1.35	1.15

The above prices include bags. If shipped in barrels the price is 10c per bushel more; if in 1½ bushel baskets add 15c per bushel.

ONION SETS.

	A standard bushel of bottom sets weighs 32 lbs.	
	Prices Subject to Market Changes.	
	25 lbs. 100 lbs.	
White Bottom	3.50	12.50
Red Bottom	2.75	10.00
Yellow Bottom	2.75	10.00
Red Top (Genuine) lb., 35c; 5 lbs. at 30c per lb.		
White Multiplier ..lb., 30c; 5 lbs. at 25c per lb.		
Yellow Multiplier	3.50	12.50
Prize Taker	3.50	12.50

MILLETS.

	Lbs. to acre.	Bu. 100 lbs.	
German N. K. & Co.'s Sterling			
(sold only in sealed bags)	36	2.45	4.50
Northland Brand	36	2.35	4.35
Viking Brand	36	2.25	4.10
Common, N. K. & Co.'s Sterling			
(sold only in sealed bags)	36	2.30	4.20
Northland Brand	36	2.10	3.85
Broom Corn or Hog			
Northland Brand	36	1.65	2.90
Early Fortune, Northland Brand	36	1.65	2.90
Siberian, N. K. & Co.'s Sterling,			
(sold only in sealed bags)	36	2.25	4.15
Northland Brand	36	2.15	3.95
Viking Brand	36	2.05	3.75
Hungarian, N. K. & Co.'s Sterling,			
(sold only in sealed bags)	36	2.35	4.30
Northland Brand	36	2.25	4.15
Viking Brand	36	2.15	3.90
Japanese	36	4.20	8.00

MISCELLANEOUS.

	Bu. 100 lbs.	
Amber Cane or Sorghum, Min-		
nesota grown	5.00	
Southern Amber Cane for Fodder	3.35	
Mammoth Russian Sunflower	7.80	
Spring Vetches	8.65	
Winter or Hairy Vetches	13.20	
Canada Field Peas, Yellow	3.65	
Canada Field Peas, Green	3.65	
Golden Vine Field Peas	3.65	
Scotch Peas	3.65	
Cow Peas, Northern Grown	8.50	
Soy or Soja Beans, Northern		
Grown	8.50	
Feterita	3.90	
Lupins	10.35	
Sudan Grass	33.00	

HOG PASTURE MIXTURE.

	100 lbs.	
N. K. & Co.'s Annual	4.00
Permanent	14.50

CHOICE SELECTIONS FOR THE HARDY GARDEN.

The old fashioned garden! What a host of memories come sweeping back. Who of us does not instantly see the dear old place where we joyfully tripped after our grandmother as she potted about, tying up a vagrant branch here, snipping off a brilliant blossom there?

What a riot of color wherever we looked—over towards the fence a thicket of sky blue delphiniums whence comes the incessant hum of bees; again: the grape arbor the first hollyhocks just unfolding their pink and white rosettes. Bright orange along the hedge-row gleam clumps of gaillardias. Temptingly beside us a cluster of canterbury bells invites a youthful hand to shake and see the blossoms tremble.

How peaceful and happy even the swallows seem, circling around in an endless game, now overhead, now towards the house where the daisy bed looks like a midsummer snowbank.

*"Bliss was it that morn to be alive,
And to be young was very heaven."*

The fragrant vision is all too fleeting—with a start we return to the present. But who of us does not long to have the old-time garden now? We can have one and enjoy such flowers as our grandmothers never dreamt of. For years patient men at home and abroad have been at work on perennials, making the old sorts bloom more freely, enlarging the blossoms, bringing out new colors.

Our special selection of hardy plants for 1915 includes many desirable sorts. They may be found below and on pages 82 to 87. We offer these as the best and most suitable for our Northwest climate. These plants have all been hardy grown; they are now well established and with reasonable care should give satisfactory results. They will be ready for delivery in April and May.

The following are some choice varieties which are not included in our regular plant list on pages 82 to 87. Price, by express at purchaser's expense, 25c each; or 35c each if sent postpaid.

Anchusa, Italian Dropmore Variety. Forget-me-not-like blue flowers borne in profusion on branching stalks 4 to 5 feet tall. They bloom from May to July and are of very vigorous growth. By express at purchaser's expense: each, 25c; 6 for \$1.25; doz., \$2.50.

Aquilegia, Columbine, Long Spurred Mixed. While similar to the older varieties these have much larger blossoms, their long spurs giving the flowers a very striking appearance. By express at purchaser's expense: each, 25c; 6 for \$1.25; doz., \$2.50.

Helianthus, Hardy Sunflower. Free flowering plants at their best in September and October.

H. Miss Mellish. Bears single, golden yellow blossoms, grows about 6 feet tall. By express at purchaser's expense: each, 25c; 6 for \$1.25; doz., \$2.50.

H. Wolley Dodd. Starts to bloom about 2 weeks after Miss Mellish. Has very deep yellow flowers. By express at purchaser's expense: each, 25c; 6 for \$1.25; doz., \$2.50.

Pentstemon barbatus Torreyi. Graceful plants bearing 3 foot spikes of crimson flowers blossoming from June to August. By express at purchaser's expense: each, 25c; 6 for \$1.25; doz., \$2.50.

Pyrethrum Hybrids. Daisy-like flowers in fine shades of rose, crimson and white. They blossom in June and grow about 18 inches high. By express at purchaser's expense: each, 25c; 6 for \$1.25; doz., \$2.50.

Pyrethrum Uliginosum, Giant Daisy. One of the best September blooming perennials for the Northwest, bearing its large white flowers on 5 foot stems. By express at purchaser's expense: each, 25c; 6 for \$1.25; doz., \$2.50.



The Daisy bed looks like a midsummer snowbank.

Grandmother's Collection Hardy Garden Plants.

Any of the following plants 25c each at purchaser's expense or 35c each if sent postpaid.

Campanula, Canterbury Bells. Handsome, erect plants to 3 feet high, commencing to flower in July and continuing for weeks if given a partially shaded location. They need a rich soil and extra good winter protection. Cover the crowns with a board resting on bricks and pile leaves or straw litter on that. Blue, pink or white.

C. Calycanthema, Cup and Saucer. A fine type of this old favorite, differing from ordinary Canterbury Bells in having a large calyx below the bell giving the flower a cup and saucer appearance. Blue, pink or white. By express at purchaser's expense: each, 25c; 6 for \$1.25; doz., \$2.50.

C. Medium. The old-fashioned sort with beautiful large, bell-shaped flowers. See illustration, page 82. Blue, pink or white. By express at purchaser's expense: each, 25c; 6 for \$1.25; doz., \$2.50.

Chrysanthemum leucanthemum, Shasta Daisy. One of the most valuable perennials, blossoms all summer producing showy blooms of the purest white. It is very satisfactory for cut flower use or for a striking garden effect, as shown in our illustration above. By express at purchaser's expense: each, 25c; 6 for \$1.25; doz., \$2.50.

Coreopsis lanceolata grandiflora. One of the best of all the hardy plants for cut flowers. From June until frost it displays a profusion of golden blossoms uplifted on long graceful stems as in the illustration on page 80. Even the foliage is decorative, the pointed lance shaped leaves, from which this variety takes its name, being very attractive to use with the flowers in bouquets. The plant is of a habit, vigorous in growth, and rarely attacked by insect or disease. By express at purchaser's expense: each, 25c; 6 for \$1.25; doz., \$2.50.

Delphinium, Hardy Larkspur. Always a striking flower, the older varieties were much prized in the gardens of yesterday. But how much finer they are today! Now they are indeed well called "Queens of the Border." No longer does the Delphinium show only a single blue stalk but offers us instead a splendid range varying in height from 18 inch Chinensis to the showy Hybrids, stately plants 5 to 6 feet tall, whose side shoots flower after the main spike has finished, thus prolonging the blooming period. If the flower spikes are removed as soon as they fade, new ones will keep appearing at intervals all summer. See page 83 for illustration. By express at purchaser's expense: each, 25c; 6 for \$1.25; doz., \$2.50.

Gaillardia grandiflora, Blanket Flower. A very free blossoming perennial bearing large yellow or red daisy shaped flowers all through the summer. They are very showy and of remarkably easy culture. One of the best plants for cut flowers. By express at purchaser's expense: each, 25c; 6 for \$1.25; doz., \$2.50.

Hollyhocks. One of the showiest, most stately perennials, Hollyhocks were a typical feature of the old-fashioned garden and so today they seem to embody the very essence of those by-gone borders. For screening a wall or fence they are especially effective but should always be staked to keep them erect. They require rich, deep soil, well drained and will repay in improved bloom any extra care. White, rose, red, maroon or pink. By express at purchaser's expense: each, 25c; 6 for \$1.25; doz., \$2.50.

Special Offer.

Grandmother's Collection Six Hardy Garden Plants, by express at purchaser's expense, \$1.25, or sent prepaid for \$1.75.



Hollyhocks unfolding their pink and white rosettes.

HARDY PERENNIAL PHLOX:

PHLOX ARE AMONG THE SHOWIEST AND MOST SATISFACTORY OF GARDEN PLANTS, THEIR EASE OF CULTURE, PROFUSION OF BLOOM, BRIGHT COLORS AND NEAT HABIT, MAKE THEM A FAVORITE EVERYWHERE. PLANT IN APRIL OR MAY.

OUR SPECIAL OFFER:

STRONG ROOTS, EACH 25 CENTS POSTPAID.
BY EXPRESS AT PURCHASERS' EXPENSE EACH 20C;
DOZ. \$2.00

SEE PAGE 86 FOR
COMPLETE LIST OF VARIETIES

HENRY MURGER

B. COMTE

RYNSTROM

NORTHROP, KING & CO., SEEDSMEN
MINNEAPOLIS, MINNESOTA